# AVIATION SECURITY

(101-14)

# HEARINGS

BEFORE THE

## SUBCOMMITTEE ON AVIATION

OF THE

## COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

MARCH 21, 1989 AND APRIL 25, 1989

## H.R. 1659

TO IMPROVE AVIATION SECURITY BY REQUIRING THE INSTALLATION AND USE OF CERTAIN EXPLOSIVE DETECTION EQUIPMENT AT CERTAIN AIRPORTS LOCATED OUTSIDE THE UNITED STATES AND BY PROVIDING ASSISTANCE FOR THE ACQUISITION OF SUCH EQUIPMENT, AND FOR OTHER PURPOSES

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## SUBCOMMITTEE ON AVIATION

## HEARING ON
## AVIATION SECURITY

TUESDAY, MARCH 21, 1989
10:00 A.M.
2167 RAYBURN HOUSE OFFICE BUILDING

## SUMMARY OF SUBJECT MATTER

The Subcommittee will receive testimony on aviation security matters from government and industry witnesses as well as from families of the Pan American World Airways Flight 103 victims. Specific topics and issues will include:

(1) A review of what the Federal Aviation Administration and other government agencies have learned with respect to aviation security from the Pan Am 103 accident, including the effectiveness of systems to provide timely security intelligence and information to airlines, airports, and aviation authorities.

(2) A review of the adequacy of DOT/FAA regulatory actions on aviation security since 1985 when public and Congressional interest in security was heightened by the TWA hijacking and other incidents. The policy question of whether U.S. and foreign carriers should be subject to the same security standards at foreign airports will also be addressed.

(3) The status of U.S. Government efforts to obtain aviation security clauses in bilateral civil aviation agreements.

(4) A review of U.S. government actions under the Foreign Airport Security Act of 1985.

(5) A review of the FAA's programs to develop and disseminate explosive detection technology. The policy question of whether the government, airlines or airports should pay for the wide implementation of this technology will be addressed.

(6) The consideration of any legislative proposals to improve aviation security.

## THE SECURITY PROBLEM

Pan American flight 103 crashed in Scotland on December 21, 1988 after being blown apart by a powerful bomb. 270 people were killed, including eleven on the ground. The Federal Bureau of Investigation and foreign law enforcement authorities continue to investigate and search for those responsible.

Pan Am 103 was the latest event that demonstrates the vulnerability of civil aviation to sabotage and violent attacks by terrorists. Since 1985, three other airliners have been bombed resulting in death to passengers. On June 23, 1985 an Air India flight suffered a bomb explosion over the North Atlantic killing 329 people. On April 2, 1986, a bomb exploded on a Trans World Airlines flight near Athens killing four people and injuring nine. The aircraft was landed safely. On November 29, 1987 a Korean Air Lines flight exploded over Thailand killing 115 people.

In addition to acts of sabotage, the world's aviation system continues to be plagued by aircraft hijackings and attempted hijackings, though since 1985 the annual number is less than half of what it was prior to 1985. Between 1980 and 1985, there were 25 to 38 hijackings worldwide each year. In 1986 and 1987 there were 13 in each year, and in 1988 there were 15 hijackings.

At airline security screening points at U.S. airports, approximately 2,700-3,300 weapons are detected annually. Also, approximately 1,300-1,500 persons are arrested each year for attempting to carry firearms or explosives on board aircraft.

Screening also intercepts between three and nine explosive or incendiary devices each year.

Finally, it is the assessment of U.S. and foreign authorities that the threat to civil aviation from terrorists is on the rise.

## FEDERAL REGULATION OF AVIATION SECURITY

The Federal Aviation Administration regulates aviation security and establishes the standards to which airlines and airports adhere. In general, the FAA requires the airlines and airports to adopt and implement security programs designed to prevent aircraft hijacking, sabotage, and related criminal acts.

Each airline is required to adopt an FAA-approved comprehensive security program, known as the Air Carrier Standard Security Program. This program details passenger screening system (passengers passing through metal detectors and checked baggage being x-rayed), security training programs for airline personnel, which personnel will have access to certain areas (such as ramps), personnel identification procedures, how baggage and cargo will be processed from a security standpoint, and other matters related to security.

Each airport is also required to develop and adopt security programs in accordance with FAA guidelines. Depending on the size and scope of operations at an airport the security requirements vary from airport to airport. Included in airport security responsibilities are the assurance of a law enforcement presence at the airport, plans to coordinate with other government agencies in security emergencies, control of access to operation areas and identification procedures for persons in operations areas, security training for appropriate personnel, and adequate perimeter fencing and locked doors for certain areas of the airports.

The most visible means of security is the passenger checkpoint in an airport where a passenger walks through a metal detector and his/her carry-on luggage is x-rayed for weapons. These checkpoints are the responsibility of the airlines and are typically operated by a security contractor. The contractor's personnel are required to be trained in accordance with FAA training specifications and the equipment must meet FAA performance specifications.

Since the summer of 1985, when a TWA flight in the Middle East was hijacked and the Air India bombing and other security problems occurred, the FAA has taken five major aviation regulatory initiatives with respect to security as well as requiring significant changes in the airlines' standard security programs.

(1) Transportation of Federal Air Marshals.

On July 8, 1985, the FAA issued regulations requiring airlines to carry federal air marshals even if it meant "bumping" a paying passenger. Prior to this rule airlines had sometimes "bumped" an air marshal in favor of a paying passenger.

(2) Security Coordination and Training Regulations.

On July 16, 1985, the FAA issued an emergency regulation requiring each airline to improve its security by identifying and training personnel to be "Security Coordinators" for each flight. The duties of the security coordinator are to monitor and ensure that security requirements are being followed. This regulation also required that flight crews also receive expanded training in security. Airlines were also required to provide evidence of compliance with these new requirements.

(3) Screening of Airline and Airport Employees.

On December 22, 1987, the FAA issued regulations requiring that employees of airlines, the airport, and other law enforcement officials pass through the metal detection and x-ray screening before entering the secure area of an airport. Prior to this regulation these persons typically walked around the screening equipment.

(4) Access to Secured Areas of Airports.

On January 6 of this year, the FAA directed that airports ensure that only persons authorized to have access to secure areas be in those areas. Airports were directed to establish computerized identification card systems and access procedures for all persons, including employees of businesses located at the airport. Large airports have until August of this year to comply with these new regulations.

(5) Submission of Foreign Airlines Security Programs.

On March 14, the Secretary of Transportation announced that the FAA will issue a regulation to require foreign airlines to submit their security programs to the agency for review and acceptance, and if need be, the agency will be able to direct mofications. Currently the FAA requires foreign airlines to have security programs and the FAA is provided the details of those plans upon request, but there is no provision for the FAA to review and accept those programs or direct modifications. This new regulation had been proposed last September.

Change in the Airlines' Standard Security Programs

With respect to changes in the standard security program, in July 1985 the FAA eliminated curbside baggage check-in for international flights and required airlines to institute systems for matching passengers to baggage on certain international flights.

After the Korean Air Lines bombing in 1987, the FAA required amendments to airline security programs aimed at addressing the problem of a passenger disembarking at an intermediate point and leaving carry-on luggage on board by requiring all passengers to disembark with their carry-on luggage so the aircraft could be swept for left behind carry-on luggage.

Last April, ICAO amended Annex 17 to require full reconciliation of passengers and checked baggage on all international flights or have all checked baggage x-rayed or physically inspected, and the FAA incorporated this new approach into the airline security programs. Next month these passenger/checked baggage reconciliation systems will be further strengthened to take account of gaps in the system related to interlining between airlines and passengers disembarking at intermediate stops without their checked baggage.

Last December after the Pan American 103 bombing, the FAA required that U.S. airlines strengthen their security programs at certain European and Middle Eastern Airports. These measures include:

- Positive matching of passengers and baggage and 100% x-ray or physical inspection of all checked baggage;
- No passenger access to checked baggage after matching and physical check;
- Increased random selection of passengers for enhanced screening. Checked baggage of these selected passengers will be emptied and all contents physically examined;
- Small packages and parcels that are shipped through passenger ticket counters will be x-rayed or physically examined prior to shipment.

On January 9, the leadership of the Committee wrote the Secretary of Transportation urging that these new requirements imposed on U.S. airlines be imposed on all foreign flag carriers serving the U.S. from Europe and the Middle East. As of this writing, the Committee leadership has not received a response to this letter, but foreign air carriers continue to not be subject to those December requirements.

## EXPLOSIVE DETECTION TECHNOLOGY

Following the aircraft sabotage events in 1985, the FAA was provided additional funding to conduct research and development into technological means to detect explosives in checked baggage and cargo. The FAA has been spending $9-10 million annually on research into new explosive detection technologies. Two technological approaches have been explored, thermal neutron activation and vapor detection.

Thermal neutron activation (TNA) is a technique whereby baggage passes through a device that irradiates the baggage with neutrons, a computer analyses the "signature" return of chemical compounds in the baggage and signals the operator if the "signature" matches that of chemical compounds used in explosives. Early experience indicates a 95% success rate in the detection of explosives and a 4% false alarm rate. This is considered to be very good by security professionals. Six TNA units will be delivered to the FAA in the last half of this year for deployment in airports.

Vapor detection systems continue to be researched. This technology is being designed to examine passengers and carry-on luggage. The technique here is that the passenger or bag is "sniffed" by the device to detect the presence of the chemical compounds used in explosives. A prototype device has been tested and generated positive results, but the time to process a passenger (30 seconds) is believed too long to be practical. Further work on reducing processing time is underway.

An issue before the Congress is how widespread should the TNA technology be disseminated and who should pay for the dissemination (airlines, airports, or the government).

## FAA'S CIVIL AVIATION SECURITY ORGANIZATION

The FAA's Office of Civil Aviation Security is headquartered in Washington. Within FAA's organization, the Civil Aviation Security Office reports to the Associate Administrator for Aviation Standards. The FAA's security personnel are located in all parts of the country and around the world.

In recent years, the Administration has sought, and the Congress has appropriated, funds to increase the number of FAA personnel devoted to security. Between 1985 and 1988 FAA's security personnel increased from 236 to 524. In the current fiscal year, that level will climb to 580, and the Administration has requested an additional 120 security positions in the FY 1990 budget submission which would bring the FAA's security staff up to 700.

The FAA also has a Federal Air Marshal program which provides security coverage on selected flights of U.S. air carriers. The size and scope of the air marshal program is classified.

## FOREIGN AIRPORT SECURITY ASSESSMENTS

In August 1985, Public Law 99-83 enacted the Foreign Airport Security Act establishing the foreign airport security assessment program. This legislation was largely developed by the Committee on Public Works and Transportation. This law directed the Department of Transportation and the Federal Aviation Administration to assess security at foreign airports served by U.S. airlines, foreign airports served by foreign airlines that serve the U.S., and foreign airports which pose a high risk to international travel. Nearly 200 airports undergo these security assessments.

The assessments are made by FAA security personnel who evaluate an airport's security against the security standards contained in Annex 17 to the Convention on International Civil Aviation. The law directed that the Annex 17 standards be treated as the minimum level of security. Annex 17 provides the basic security requirements on passenger screening, baggage control, secured areas and law enforcement agreed upon by the world's government aviation authorities.

(Last month, the International Civil Aviation Organization adopted a plan to review the Annex 17 standards to determine what changes were needed in light of the Pan Am 103 bombing; consider what special measures should be put in effect when threats are made; and expedite further development of explosive detection equipment; and consider establishing an international system for marking explosives.)

If FAA finds deficiencies in security the foreign country is notified of the deficiencies along with recommendations to correct the problems. If the foreign airport does not correct the security problems within 90 days, the traveling public is provided notice by the Department of Transportation and the Department of State is required to issue a travel advisory. One such public notice has been issued for Manila Airport, Philippines in August 1986. In September 1986 the notice was lifted after the deficiencies had been corrected.

A December 1988 a General Accounting Office report entitled FAA's Assessment of Foreign Airports recommended that the FAA should conduct analyses as part of its airport assessments of the foreign countries' testing and evaluating of these airport security systems. The GAO found that the FAA has not conducted its own security tests and evaluations at foreign airports because of issues involving national sovereignty. In light of this, the GAO recommended that FAA observe the host country's security tests. Beyond this issue, the GAO stated that security professionals believe that the FAA assessments "... have made a difference and have brought about a needed increase in security awareness."

## LEGISLATION REFERRED TO THE COMMITTEE PERTAINING TO SECURITY.

H.R. 617 introduced by Congressman Dan Burton on January 24, 1989.

This bill would amend the Federal Aviation Act to require that each air carrier airport's law enforcement presence and capability include dogs to be used to detect plastic explosives and other devices or materials which may be used in aircraft piracy and which cannot be detected by metal detectors.

H.Con.Res. 52, introduced by Congressman Joe Kennedy on February 9, 1989.

This resolution would express the sense of Congress that the Secretary of Transportation should do everything in his power to ensure that: (1) the highest level of security standards currently in use in international aviation are applied by the International Civil Aviation Organization to all international airlines and airports; (2) these standards be adopted by the February 16 meeting of the directors of ICAO; (3) ICAO require all international airport authorities to adopt a number of specified security enhancements; (4) the ICAO Annex 17 standards are implemented by all U.S. airlines and airports; (5) the Department of Transportation and Department of State enhance and expand the "Anti-Terrorist Assistance Program"; (6) threat assessment capabilities are enhanced and when the threat is deemed substantial, passengers informed; and (7) ICAO establish a task force to develop regulations to be applied under Annex 17 to effectively combat unlawful interference with any international flight.

# AVIATION SECURITY

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## TUESDAY, MARCH 21, 1989

House of Representatives,
Subcommittee on Aviation,
Committee on Public Works and Transportation,
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:07 a.m., in room 2167, Rayburn House Office Building, Hon. James L. Oberstar (chairman of the subcommittee) presiding.

Mr. **Oberstar**. The Subcommittee on Aviation will please come to order.

Today the Subcommittee on Aviation resumes hearings on aviation security initiated four years ago by the Subcommittee on Investigations and Oversight which I chaired at the time along with the then ranking Republican, Mr. Gingrich, and today's ranking member, Mr. Molinari, as an active participant in those hearings.

The vulnerability of our aviation system to violent attacks by terrorists was brutally punctuated last December 21st when a powerful bomb destroyed 270 lives aboard Pan Am flight 103 when that 747 crashed over Lockerbie, Scotland.

Despite the tightening of security measures after the bombing, the air traveling public continues to feel vulnerable to terrorist attacks. Our hearing today will attempt to shed some light on whether that feeling is justified and whether the response of both Government and industry to the most recent attack and to the broader question of widespread terrorism is adequate and effective.

Aviation terrorism has evolved over time. As I have observed it, I would say that phase I was the sky-jacking era, from 1969 through the early 1970s, a period when we were experiencing an average of one sky-jacking every two weeks. But just as metal detectors and other steps taken to assure security were beginning to have their effect, terrorism was moving to what I call phase II, the random destruction of aircraft by concealed bombs carried either under a seat or hidden in the hold.

It seems that we are in a pattern of always being just one step behind the terrorists. Putting us a step ahead of the terrorists is the purpose of this hearing and any legislative or administrative action that may result from it.

If terrorists find a gap or even a little tear in our security net, they exploit it and hundreds of human lives are shattered in one explosive blinding instant. Government and industry then move to plug that hole, so that type of attack doesn't happen again.

Time passes. A different gap is exploited, another tragedy, more lives lost. Again, Government and industry try to sort out the problem, find where the hole was, and move to plug it.

Despite recent actions to enhance security, the traveling public continues to have the sense that there continue to be holes in the safety net and that terrorists are merely waiting to exploit them.

The purpose of our hearing is not to identify the holes and suggest fixes, but rather its purpose is to inquire into the broad systemic questions of security on the ground and in the air. Do Government and industry need to change any of our assumptions about how we balance convenience and security? Are Government and industry devoting enough resources of people and money to assure security?

Our security system has been built incrementally and through adjustments. Do we need to make a fundamental systematic examination of security so that we are not simply once again fighting the last war?

Since the summer of 1985, there have been four aircraft bombings, an average of more than one a year. Are all agencies of all governments and all airline companies doing everything necessary and prudent and responsible to assure that the record improves in the next three to four years?

Today we have a relatively long list of expert witnesses who we hope will be able to provide some answers to these and other questions. We also have a long list of Members participating in the hearing. So I will insist on adhering to the 5-minute rule so that we can move quickly through the witnesses and assure that all Members' questions will be adequately answered.

The Secretary of Transportation, Sam Skinner, has moved decisively on the issue of terrorism during his brief tenure in office, and I commend him for those efforts. I am impressed the way he has acted and his sincerity of purpose and willingness to command all the resources of Government and industry toward this purpose.

The Secretary has advised us that he has appointed a task force to analyze the issue of security notifications to airlines and how such process is handled. There may be some questions Members want to ask today about that issue. I would ask them to withhold such questions. We will have an Executive Session following today's open testimony at which some of those matters may be responded to, but later, within a month I expect, we will receive the full report of that task force. Out of respect for sensitive issues, Government witnesses may wish to ask that full response be given in Executive Session, and we will take such testimony at that time.

This is a vitally important hearing. It will be not just one hearing; it will be followed up by a series of continuing inquiries and actions by the committee in cooperation with the responsible Government agencies, foreign governments, and our airline companies.

I want to welcome all the witnesses today, and I particularly want to welcome our Members and commend them on a very large turnout here for this hearing.

It now gives me great pleasure to recognize the ranking Republican, a gentleman who has devoted so much of his career in Congress to issues involving aviation and with such effectiveness, Mr. Molinari.

Mr. MOLINARI. Thank you, Mr. Chairman.

As we open the hearing today, I want first and foremost to express my heartfelt sympathy to the families and friends of the victims of the bombing of Pan Am flight 103, many of whom we have with us or watching today.

As grieved and angry as the Nation is over this tragedy, we know no one can possibly feel the pain as personally as you have, nor could anyone possibly imagine the anger you feel at this vile act of terrorism that has taken your innocent loved ones from you.

I might add that three of the individuals killed in that flight come from my district and I have talked to their families, and the horror and anguish they're going through is something that is very painful.

All of us may wish for a method of swift and sure retribution for this act and for guarantees for the future, but the nature of terrorism today leaves us with no guarantees. What we must do instead and out of deference to you is to review what measures have been taken by our Government to protect American travelers and determine what now remains to be done.

We recognize that when a terrorist placed a bomb in a Pan Am airliner, it was not an attack on Pan Am Airlines; it was an attack on the U.S. airline industry. It was an attack on innocent U.S. citizens, to send a message to the U.S. Government—this is not just an aviation issue; it is a global and very complex issue which we must address as a Government more effectively.

I am particularly looking forward to hearing today about the important new technology being developed for airport security. It is abundantly clear that we must have state-of-the-art technology out in the field as soon as possible and quickly deal with the controversy over who will pay.

It is also likely that there are additional procedures that can be implemented to enhance aircraft and airport security. The administration is to be commended for swift action to tighten security in the aftermath of Pan Am 103. I'm sure that our witnesses will have other measures to suggest today to further improve the system.

I might add a personal observation. With deregulation and the problems that some of the carriers have had over the past few years in terms of the balance sheets, what we've witnessed is in some cases a disassembling of the carriers' security division; in other cases they have reduced the numbers of those employed within the security division of those carriers to the point where they have but one or two left.

I think what happened is that they perceived the threat to be lessened. We had some very good people, and our Investigation Oversight Committee was very impressed by what was in place several years ago. We find that's no longer in place today.

The security at most of our airports rests with the carriers themselves. I hope that the witnesses that are coming before us today will address that issue and enlighten us as to why these steps were taken, why they cut back on their security divisions, why we don't have the same degree of protection today that we had by the carriers several years ago when, in fact, it would appear to us that we need greater protection today, greater surveillance by the carriers themselves.

Mr. Chairman, I, together with you, look forward to the hearing today, and I hope that some of those very important questions will be answered and some guidance be given to the committee so that perhaps we may legislatively move to some solutions.

Thank you very much.

Mr. **Oberstar**. I thank the gentleman for that very sensitive statement and responsiveness to the concerns of the families of the victims of Pan Am 103.

The Chair notes the presence of a quorum and would recognize the gentleman from New York for a motion.

Mr. **Molinari**. Mr. Chairman, pursuant to Rule 2(f) of the committee rules, I move that upon conclusion of the scheduled open hearing, the subcommittee proceed with a hearing closed to the public on the grounds that disclosure of the testimony and other evidence to be presented at that portion of the hearing might endanger the national security.

Mr. **Oberstar**. Any questions about the motion? [No response.]

All those in favor say aye. [Chorus of ayes.]

Opposed, no? [No response.]

The motion is carried. The committee will meet again in Executive Session on the conclusion of the public testimony.

Ordinarily the Chair would like to take opening statements from Members, but in view of the large number of witnesses and the large number of Members, we would, by unanimous consent, accept other statements for the record and at this point proceed to our first witnesses.

[The statements of Messrs. Mineta, Towns, Payne, and Lightfoot follow:]

### Opening Statement of Norman Y. Mineta, Member of Congress

Thank you, Mr. Chairman. I commend you for your foresight in scheduling this hearing.

The issue of security in the aviation industry naturally draws the greatest attention when it fails. Yet security must always be in the forefront of our concerns. The role of government is to be active, not reactive, in protecting the lives of travelers and of the dedicated employees in the industry.

I am eager to hear from our witnesses today about improvements which can be made in our aviation security network. And what lessons have been learned from the tragedy, means have been found to greatly decrease the change that such an act of terrorism could be successful in the future. The Pan Am-Lockerbie tragedy is painful enough to bear. It would be more painful if we could not at least hope to lessen the chance of a recurrence.

I do not mean to downplay the difficulty of dealing with terrorists who lack respect for law or human life. But several efforts showing promise to deal with this form of terrorism have been batted around for quite a while without any sign of implementation.

For example, much work has been done on improved explosion detection devices, and these devices have a proven track record. Yet their implementation has been delayed by turf battles. The FAA, the airlines and the airports have argued over who will shoulder the burden of paying for these devices. In the meantime, travelers go unportected.

I hope today's testimony includes a timetable and specific information from the FAA about how and when these decisions will be made.

I am also eager to hear more about Secretary Skinner's proposal to work toward more stringent security standards in foreign airports. We must respect the sovereignty of other nations, but we also have a responsibility to protect U.S. travelers as well. Surely a balance between these two concerns can be struck which provides for adequate security for air travelers.

Again, thank you, Mr. Chairman, for your leadership on this important issue.

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### STATEMENT OF CONGRESSMAN ED TOWNS

Today, Mr. Chairman, we have the sad task of determining where we went wrong on December 21, 1988. In providing security for the passengers on Pan Am Flight 103, somewhere, somehow, the necessary precautions were overlooked. As a result, 270 people died.

While we are all anxious that this incident should never be repeated, we must not be to quick to rush to judgment about what the appropriate solutions are to addressing aviation security concerns. One issue that we should be clear on, however, is that improved security measures will not be cheap. We can not expect our airlines and/or airports to institute new security improvements with little or no support from the Federal government. This Committee has repeatedly urged that the Airport Trust Fund be used for its intended purpose: improving the nation's airports. There is certainly no better or more urgent need than improved security for our commercial aviation system.

I would that this hearing will generate the kind of evidence and support we need to release the Airport Trust Fund monies so that our aviation security needs can be met without further delay.

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### CONGRESSMAN LEWIS F. PAYNE, JR.

Mr. Chairman, thank you very much for calling this hearing. We are a society of air travellers, and air safety is a matter of great concern to us. Although safety measures have improved over the years, terrorists still find the weak link in our system. We must constantly strive to stay one step ahead in our security measures in an effort to protect the flying public. Although it is not realistic that we will ever be 100% terrorist-proof, I believe that we should explore all possible methods to get as close to that goal as possible.

I want to thank the family and friends of those who were on Pan Am Flight 103 for coming here today. You have my deepest sympathy, and please be assured that this Subcommittee wants to do all possible to ensure that a similar group need not ever come before us again.

I look forward to hearing the testimony today on the problems we face, and how we might speedily and effectively address them.

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### STATEMENT OF CONGRESSMAN JIM LIGHTFOOT

Thank you, Mr. Chairman. I am pleased we are considering the issue of airpline safety today. All of us agree we have a problem on our hands. I'd also like to thank our witnesses for agreeing to speak publicly today on this sensitive subject.

I'd like to make the point, however, that any action Congress takes on this issue must be carefully weighed and the consequences considered. Too frequently, the federal government imposes mandates on the private sector without providing any financial resources with which to meet those mandates. I'm sure most of us can think of examples of such unfunded mandates. One area where such mandates commonly appear comes under the heading of environmtal law.

Once again, I welcome our witnesses and thank them for sharing their insight on this security problem.

**Mr. OBERSTAR.** The Chair will now recognize the gentleman from Oklahoma, Mr. McCurdy for his statement and then the gentleman from New York, NY. McNulty. Congressman Dan Burton of Indiana was also to appear at this time, but has been detained because of other committee business. He will be here later.

We thank you for being here with us.

## TESTIMONY OF HON. DAVE McCURDY, A REPRESENTATIVE IN CONGRESS FROM OKLAHOMA, AND HON. MICHAEL R. McNULTY, A REPRESENTATIVE IN CONGRESS FROM NEW YORK

Mr. McCurdy. Thank you, Mr. Chairman.

I appreciate the opportunity to testify on the Airport Security Technology and Research Act of 1989 which I am introducing today along with my colleagues, Tom Lewis from Florida and Mr. Dan Glickman from Kansas.

We're witnessing an attack by international terrorists on innocent victims, commercial aviation, and the traveling public—terrorist attack with no warning and no rationale. Their weapon of choice of pliable, odorless substance which is twice as powerful as TNT and is virtually invisible to conventional security devices. It can be hidden in a briefcase or a small cassette recorder, as we have recently seen.

Mr. Chairman, I might just take a moment to say to some of my colleagues here, as a member of the Intelligence Committee, I once went to one of our intelligence agencies to review with them some of the security regarding terrorist devices and explosives, and we had a meeting for a couple of hours. At the end of the meeting one of the gentlemen said, "Oh, by the way, let me show you how dangerous these devices are and how difficult they are to detect."

He took the briefcase that he had laid beside me and had been sitting there for two hours and he opened the briefcase. Inside the briefcase, he pulled out the liner and it was lined with plastic explosives, or simulated plastic explosives. He pulled out a liquor bottle and showed how it, too, was filled with explosives. He had taken that briefcase into this very secure building undetected.

We were reminded also of the deadly nature of plastic explosives like SEMTEX when Pan Am flight 103 exploded over Lockerbie, Scotland last December. A total of 270 people died that day.

Unfortunately, we cannot change the tragedy of the Lockerbie incident. We can, however, fight back against the use of plastic explosives. Thermal Neutron Activation is a mature technology that has been proven to have 95 percent accuracy in detecting plastic explosives.

During the recent hearing held by the Committee on Science Space and Technology, chaired by my successor subcommittee chairman Tim Valentine, on which I serve, Allan McArtor stated, with respect to TNA, "We do not see any technical hurdles. However, we would like to see some improved performance capabilities with respect to through-put," through-put being the time it takes to go through the devices.

The Federal Aviation Administration has the consolidated lab and field tests on TNA and other sister technologies, but, to date, has not done enough to see that this equipment be expeditiously installed in major airports throughout the United States.

As you know, the FAA has planned to deploy six TNA devices at the high-risk airports within the next year, and I commend them on this effort. However, I believe that the effort needs to be accelerated and a clear agenda set for the installation of explosives detection equipment in all major airports.

Terrorists are not likely to curtail their insidious acts while we debate and formulate this agenda. Therefore, the FAA should take more of a leadership role to insure that mature plastic explosives detection equipment like TNA is installed in major airports without unnecessary delay.

The Airport Security Technology and Research Act will put into place, through the FAA's rulemaking process, deadlines for installation of detection equipment. The FAA will have 90 days after the bill is enacted to initiate a rulemaking proceeding and 180 days to issue a final rule. The final rule will require that the detection equipment be installed in major airports no later than one and a half years after enactment of the bill.

The bill requires that the FAA administrator outline who will purchase, who will install and operate explosives detection equipment to be used at major airports, how the equipment will be purchased and, who will pay to maintain and operate that equipment.

The agenda must be set quickly to insure safety for airline passengers and crews from the invisible and deadly threat of plastic explosives.

The act also calls for accelerated research and development of other technologies which may be used for explosives detection. There are about 30 contracts with the FAA for other technologies including fast neutron activation, enhanced x-ray, ion mobility spectrometry, and biotechnology. The FAA should accelerate funding for research on fast, accurate, low-cost technologies so that we can keep a step ahead of the threat that terrorists pose to commercial aviation.

Mr. Chairman, it is obvious that airport security is just a part of stopping terrorism. We must work with United States intelligence agencies and encourage cooperation with foreign governments to put an end to terrorism. But, until the threat of terrorism no longer exists, Congress, the FAA, and all those responsible for safety must use available resources to insure safe air travel. Explosives detection equipment is an extremely valuable resource and, most importantly, it is available.

I thank the gentleman and yield back my time.

Mr. OBERSTAR. I thank the gentleman for his statement.

We will now take the testimony of the gentleman from New York, Mr. McNulty.

Mr. McNULTY. Thank you, Mr. Chairman, members of the committee, and family members of the victims of Pan Am flight 103.

Mr. Chairman, I am grateful to you for allowing me to express my deep concerns about the circumstances surrounding the tragedy which occurred on December 21st of last year.

I represent the 23rd District of the State of New York, the capital district of the State. Mr. and Mrs. Paul Hudson reside in Albany, which is in my district. Their 16-year-old daughter, Melina, was on board that flight. Mr. and Mrs. Joseph Hartunian of Niskayuna lost their 22-year-old daughter, Lynn.

In addition, other area families suffered in this tragedy. Ms. Barbara Primeau of Greenwhich lost her twin sons, Eric and Jason, who were 22. Mr. and Mrs. Anthony Nucci of Hudson lost their 22-year-old son Chris. Mr. and Mrs. Rafferty of Ticonderoga lost their 21-year-old daughter, Bonnie Rafferty Williams, as well as their son-in-law, Eric, 24, and their two granddaughters, Brittany, 2 months, and Stephanie, 19 months. Mr. Edgar Eggleston's son, Edgar III, of Glens Falls was returning to visit his mother who was terminally ill with cancer. He, of course, died on December 21st; she died two days later, on December 23rd.

We have a responsibility to those 259 people, the 11 in Lockerbie, as well as their families and friends, to do all that we can do to insure that such a tragedy never again occurs.

I have written Secretary Skinner and Acting FAA Administrator Whittington and Secretary Baker concerning the manner in which certain aspects of the tragedy are being addressed as well as the steps that should be taken to assure the future safety of airline passengers.

Specifically, Mr. Chairman, I have requested that in the future, when high level warnings are issued, the information should be given to the public. Also, the technology which is available to detect plastic explosives should be deployed with all deliberate speed. As Mr. McCurdy stated, this should be a top priority. In the interim, manual searches should be conducted on international flights whenever there is a threat suspected.

Additionally, family members are anxiously awaiting the return of the personal effects of their loved ones. All identifiable personal effects should be released immediately to victims' relatives. The United States Government must take the responsibility to implore the Scottish authorities to comply with this request without any further delay.

Details were released last week by the FAA that an "aviation security bulletin" was released on November 18, a full four weeks before the tragedy. The Toshiba cassette recorder equipped with a barometric detonating device was described and a photo issued, referring to the anti-terrorist sweep by West German police on October 23rd, in which a similar recorder was confiscated. British authorities issued a "British air carrier only warning" on November 22nd. A phone call warning of an impending bomb attack was placed to the U.S. Embassy in Helsinki. It was dismissed as a crank.

A second warning was released on December 19, two days before the attack, referring to the "previous telex." Incredibly, U.S. airlines operating out of Britain did not receive a copy of this until sometime between January 16 and January 19. This is deplorable and must never happen again.

I share your concern, Mr. Chairman, that airline security must be improved and that future communiques' concerning possible attacks not be dealt with in the same manner.

I would like to submit for the record a copy of the statement issued by the families of the victims on February 6th. I also intend to introduce a resolution expressing the sense of the Congress about this matter and aspects of my previous testimony.

Mr. Chairman, I thank you for permitting me to testify. I join you and the other members of the committee in the hope that we can prevent another such tragedy from occurring again in the future.

Mr. Chairman, that concludes my formal remarks. I just wanted to add for emphasis I would hope that during the course of this inquiry when you're speaking to members of the administration you could impress upon them the feelings of the families involved here about the return of personal effects and the seemingly endless delay in getting a response to their request for the return of those items.

Thank you, Mr. Chairman.

Mr. **Oberstar**. I thank the gentleman. You have just done that. They are all out there in the audience listening. You've just made that request. We will emphasize it.

I have met with several groups of the families of the victims of Pan Am 103 and conveyed to administration officials their great concern about those very matters. It has been a source of continuing pain and anguish to them to have to deal with bureaucracy and frustrations in the wake of this senseless and meaningless tragedy.

I appreciate the gentleman's questions about the way in which the warning or the phone call to the U.S. Embassy in Helsinki was handled. That has been a matter of some extensive inquiry by the State Department on their own and at this subcommittee's request. Ambassador McManaway will address that matter in further detail in his testimony shortly.

The process of notification and the issuance of FAA aviation security bulletins to which you addressed your remarks have been a matter of continuing concern. They are the focus of the task force appointed by Secretary of Transportation Skinner to find out what went wrong, why action wasn't taken more decisively and why the warnings were not heeded with greater care and concern. We will take that testimony and receive that information at a later point.

We will make some preliminary inquiries today, but that will be the subject of a very in-depth inquiry by the Department. I think it's an extremely important issue. You were right to raise it, and I appreciate your doing so.

Mr. **McNulty**. Mr. Chairman, when I was making those comments, I was referring specifically to those threats that are categories as high level alerts and not every single phone call that's made to someone. I just want to make that clear.

Mr. **Oberstar**. Certainly. That matter will be further reviewed as we proceed with the testimony today.

Mr. McCurdy, with respect to explosive detection technology, and you sit on a very important committee; it has unique jurisdiction over this matter. I know you have devoted a great deal of personal time to it, both in the Science and Technology Committee and in the Intelligence Committee.

A question arises continuously: who should pay? should the cost of providing security continue to be made out of the security tax that has been folded into the aviation ticket tax? Should it come out of general revenues? Should the airlines in some fashion be required to pay for it or airports?

Ultimately, I think the consumer pays whether in ticket tax or through his or her role as a general taxpayer.

Mr. **McCurdy**. Mr. Chairman, you raise probably, as we said, the key issue here is who will purchase or pay for the installation of this equipment?

As you know and are quite aware, the subcommittee I chair, the Transportation and Aviation Materials Subcommittee and Science and Space authorized the original research and development funds for that—it's roughly $9 million—that allowed this technology to be developed and to fill the testing. The FAA, of course, had supported that.

You are well aware that this subcommittee with its jurisdiction, and Mr. Mineta's efforts as well, that there is a lot of demand on resources and those funds that are available for purchasing such equipment.

One of the reasons that in my bill we require and direct the administrator to make that determination is to provide him some flexibility and also provide some flexibility to the Congress in how those funds are—whether determined or who's going to actually—what pot of money is going to be used.

My personal preference all along has been to use the trust fund, but I have been one of those, I guess, within the numerical minority in this body who thought that that trust fund ought to be separated from and brought out of the budget, so that we could use it for its designated purpose in the first place, which was safety equipment, installation of equipment, and other measures to ensure the safety of the flying public.

But the Congress has spoken and the majority has spoken. In this case the trust fund is not separated from the budget. Therefore, we are always squeezed here in trying to find the funds even though there's a surplus of funds sitting over there in the separate fund. I think that's unfortunate.

We basically finessed it in this bill, to be honest, and are directing the administrator to try to find and direct who best will pay for it and who can do most expeditiously and how it can result in the installation of this equipment.

Mr. **Oberstar.** If we had only had five more votes, or a switch of three votes just a couple of years ago, we would made the difference.

Mr. **McCurdy.** I see some new votes, Mr. Chairman. There are a number freshmen here this year. I think we may be closer.

Mr. **Oberstar.** Then-Chairman Mineta led the charge to remove the trust fund from the unified budget of the Federal Government, and when we can count to 218 again, we will make that effort once more. I appreciate the gentleman's response and his interest and concern.

A question for both colleagues, very briefly. What has occurred in security over the two phases I described at the outset has been an attempt to balance convenience and security, convenience of the air traveling public. Even now, as we'll learn later on, there is an effort to shorten the time for screening of one of the more advanced detection devices from 30 seconds to 6 seconds or less.

I guess the families of 103 would say, "We don't care what that time is. Take your time."

What is the proper balance between convenience and security?

Mr. **McCurdy.** There is no simple answer there, but I think safety is the key. The public has to be aware—as long as the public is unaware of a threat, as long as the public is accustomed to the sheer convenience of being able to rush to the airport at the last minute, get your bags through and get on the airliner and you're safe, and you're going to get to your destination, then they'll say we want more efficiency.

But once the public realizes that this terrorist threat is for real—and I think the flight 103 is the classic example of that threat—they, at least in the international arena, are going to have to sacrifice some of their convenience and time.

The TNA devices are a little slower. It does take more time than the conventional devices used today. But the enhanced security is such that I think the traveling public should welcome that device.

If you fly El Al, for instance, and many of us have, to Israel, they have been under terrorist threat for years, for decades. They tell you, quite frankly, if you're flying on that airline, you have to go a couple of hours early and you're going to be physically searched. Every piece of luggage, every handbag, everything on that airliner is searched physically. That's why they've not had the accidents or the incidents that have plagued other airlines, but that's a tradeoff.

You know full well what the threat is. I think we have to make it clear to the traveling public that there is a threat, that it's not just off in some other country, some other party; they are attacking Americans today; they're attacking American air carriers. As long as we continue to play the role of being involved in foreign policy actively throughout the world, we are going to be a target. I think it's important that the American public be aware of that.

Mr. **OBERSTAR**. I think it's important we understand we're in for the long haul, that it's not just one incident, but a long period of time.

Mr. McNulty?

Mr. **McNULTY**. I would agree with that sentiment generally, Mr. Chairman. I stated in my testimony that until such time as we have deployed the technology to detect the plastic explosives, that I think whenever we think that there's a reasonable threat, that there should be manual searches.

If you're going overseas, Mr. Chairman, the amount of time you're investing in that flight, I don't think too many people would think it would be unreasonable to tack an extra hour or so onto either end of that journey to insure safety.

Mr. **OBERSTAR**. Thank you very much. My time has expired.

The Chair recognizes the gentleman from New York.

Mr. **MOLINARI**. Mr. McCurdy, welcome.

I would like to just mention that, with respect to the issue of moving the trust fund off budget, this committee was solid in support of it. We didn't lose a member.

Your legislation is very interesting. What is the cost of the TNA system per unit?

Mr. **McCURDY**. It's less than $1 million per unit. I think Mr. McArtor testified it's about $800,000 for the unit. But the importance there is—and, again, I'm putting my armed services hat on—all that is dependent upon the amount of production, what the total buy is going to be, and the quantities produced each year.

If we go out and make a determination that this is the equipment that we're going to actually install, I think the per unit cost will decline over time and actually there may even be some competition developed over time as well.

I think that the technology is proven. It's 95 percent reliable. It's been tested in airports today. The costs will not be that significant if we make a decision and the administrator makes a decision to go ahead and install them.

Mr. MOLINARI. Again, looking at the trust fund, there's some $6 billion in the trust fund today uncommitted. Were we to move aggressively ahead with this program, even at the $800,000 a copy cost—we have some 270 airports—it wouldn't put a great dent in those trust funds.

What is your perception as to why we can't move more aggressively ahead so that we can put in the protection. Ninety-five percent success rate is as good as you're going to get with any system.

Mr. MCCURDY. Well, there is still that fundamental question of who pays. Unless the trust fund is deemed subject to this utilization, then we either have to appropriate the moneys directly or the airports themselves or the carriers will have to purchase this equipment. That's been a sticking point perhaps in this debate, but I think we need to get over that.

I don't think the cost is going to be that great. In my legislation, in the bill that I am introducing today, we have them start at least at the hub airports in the United States, the busiest airports. There are some 71 that would meet the definition of the number of flights per year to be a hub.

Again, we're not talking about as large a sum as we might if we were trying to install it in every single airport in the United States or those overseas.

I might also mention, because I'm sure someone is going to ask at one point, why didn't we include foreign airports in this bill? The fact of the matter is, and to be perfectly candid here for my colleagues, we wanted to avoid joint referrals—is the first instance. We don't want to have it delayed and bogged down in other committees.

If someone on the floor, even after this committee meets, would want to amend the legislation to include foreign airports, then that certainly would be welcomed on my part, but we wanted to avoid that particular parliamentary situation in the Congress today.

Mr. MOLINARI. Thank you. I think your legislation has a great deal of merit, and I look forward to having it come on the floor in the near future.

Mr. MCCURDY. Thank you.

Mr. MOLINARI. I'd like to welcome Mr. McNulty, the gentleman from New York. I haven't had the pleasure of saying hello to you yet, but welcome to you. I have just one or two questions, if I may.

In your testimony you have indicated that you would want the administration to notify the public when high level warnings are issued. That's always a question of definition.

What do you mean when you say "high level"?

Mr. MCNULTY. It's my understanding, Mr. Molinari, that last year there were approximately 22 such warnings issued on international flights. It does not seem unreasonable to me in that category of high level alerts that the public should be notified. I'm not talking about the ones that I guess there are several a day, threats that are received. Obviously, I don't think that we should interrupt international air travel every time some terrorist picks up a phone, but when they are characterized as high level alerts by people in our intelligence communities, then I think the public has the right to know.

Mr. **Molinari**. You're not making reference, for example, to somebody who receives a phone call saying there's a bomb on the Eastern shuttle coming from New York to Washington, that in a case like that people should be notified?

Mr. **McNulty**. Well, I'm not an intelligence expert, but I understand that we have ways of categorizing these threats to see if there's any substance to them. When you're able to whittle down several hundred in the course of a year to 22 that are categorized as high level alerts, it would seem to me that I would place trust in the judgment of the experts who categorize those 22 high level alerts and make them available to the public.

Mr. **Molinari**. The gentleman makes a very good point.

For a while I was receiving daily bulletins from FAA. It was astounding to see every day the number of bomb threats. We could see with some of the labor strife that's going on right now, depending upon what we define as a high level threat, how you could effectively close a carrier down by such phone calls.

Mr. **McCurdy**. If the gentleman would yield—

Mr. **Molinari**. Sure, I'm be glad to yield.

Mr. **McCurdy**. May I make one point? The sad reality is, even with warning in the instance the Pan Am flight, there is good question whether or not, even with searches, that that device would have been detected, because of the nature of the threat that we're dealing with.

We're no longer dealing with terrorists that are building bombs in their garages. They're using sophisticated triggering devices. They're using sophisticated explosives that are very, very difficult to detect, and that is why we need to go beyond just the question of warning, which I certainly concur with my friend from New York, but the point of the matter is that unless we literally take apart every camera or every briefcase, literally tear things apart, it is very difficult unless we implement this new technology.

Even that is not going—it depends on the—there are some questions as to how reliable as to certain amounts. But at least in the areas where there is the greatest threat, I think that if we move forward rapidly on this technology, that we can at least set up even a greater deterrent to that terrorist.

If that person is willing to give up their own life, then that, too, is even a more difficult question.

Mr. **McNulty**. I agree with the gentleman, but in the interim, until that technology is deployed, in the instance of these high level alerts, I believe the public has a right to know and airline passengers who are traveling should be able to make the judgment as to whether or not they want to take that risk after such an alert has been issued.

Mr. **Molinari**. Thank you. My time is about up, Mr. Chairman. I thank both the gentlemen for their responses to the questions.

Mr. **Oberstar**. Further detailed information on those matters will be provided by subsequent witnesses which we want to get to, but, just for the record, for 1987, against U.S. aircraft and U.S. airports alone, there were 639 threats evaluated at one level or another.

Gentlemen, thank you very much.

I'll turn to my other colleagues. The gentleman from the Virgin Islands?

Mr. DE LUGO. I have no questions at this time. I want to just commend Mr. McCurdy and Mr. McNulty on their testimony. I think I have learned more about this just listening, quite frankly.

Mr. OBERSTAR. The gentleman from Texas?

Mr. LAUGHLIN. I have no questions, but I want to thank Mr. McCurdy and Mr. McNulty for their comments. It's been quite educational. I commend you for being here.

Mr. OBERSTAR. The gentleman from Minnesota?

Mr. STANGELAND. I have no questions, Mr. Chairman.

Mr. OBERSTAR. The gentleman from California?

The gentleman from Colorado?

The gentleman from New York?

Mr. TOWNS. Thank you very much, Mr. Chairman. Let me commend both of you. I've enjoyed the testimony. I know, Mr. McCurdy, you indicated the fact that you would support the trust fund, getting the money for the trust fund.

I wonder if my colleague from New York would just comment on that. I did not hear him on that position.

Would you support getting money for the trust fund to put into security?

Mr. MCNULTY. Actually I'm not familiar with that issue, Mr. Towns, but it sounds like something I would like to support, yes.

Mr. TOWNS. Okay, thank you very much.

Mr. OBERSTAR. The gentleman from Iowa?

Mr. LIGHTFOOT. Just one quick question, Mr. Chairman. Mr. McCurdy, the TNA technology I know is an onward going thing. In fact, at Iowa State now they're putting together a nondestructive identification and investigation center to do research into this area.

Have you considered the potential of approaching it from another angle since one of those explosives looks like ordinary clothes line rope? We've seen a number of these things. They're very easily passed off as common, every-day items.

Possibly there should be a requirement that the manufacturers of those explosives put something in them that would make them much more readily detectable?

Mr. MCCURDY. That's a good point. I don't know if you recall the problems a few years ago with some former U.S. intelligence personnel, Mr. Wilson and others, that sold huge quantities, airplane loads—I'm not talking about Piper or Cessnas; we're talking C–130s and transport loads of SEMTEX type of plastic explosive to Libya.

Yes, you raise a good point. That's something we should consider.

There are very tight controls on the export and the distribution of this type of explosive. It's a classified type of explosive.

But we have seen in the past that it has gotten into the wrong hands, and in such quantity—again, in such huge quantity—that I think existing amounts are going to pose a threat in the foreseeable future.

Mr. LIGHTFOOT. I would think it would be a logical assumption that anyone using those materials is not going to do it under, shall we say, legitimate circumstances?

Mr. MCCURDY. That's exactly right.

Mr. LIGHTFOOT. Thank you, Mr. McCurdy.

Thank you, Mr. Chairman.

Mr. OBERSTAR. The gentleman from Tennessee, Mr. Clement?

Mr. CLEMENT. Mr. McCurdy, as we all know, not all airports are international airports. Since this TNA is approximately $750,000 per copy, is your main focus in your legislation the international airports in the United States or all airports since this equipment is so expensive?

Mr. MCCURDY. That's a very good question. We focus on the hub airports, again those that will receive the greatest traffic.

It should start—and, again, this is a rulemaking procedure by the administrator, and he could start with a priority and work down—does it have international traffic, first—and move through the most heavily traveled airports within our country.

The international issue I tried to address earlier, and that is we don't have it in this particular bill primarily to avoid sequential referral and further delays in the legislation. We want to get this out and get the direction to the administrator.

Secondly, it is a more difficult issue of trying to—we, the United States, dictating to foreign governments and foreign operators how they shall—what equipment they should install.

I think there are ways that we can do that, and we want to give the administrator and the Secretary of Transportation some flexibility—and the State Department—in how they choose to handle that.

Mr. CLEMENT. Mr. McNulty, you mentioned in your testimony about manual searches on overseas flights in case of threats. What about domestic flights?

Mr. MCNULTY. Well, I would suggest that, Mr. Clement, in cases where a reasonable threat has occurred or a high level threat has occurred, that in the cases of overseas flights, until the plastic detection devices are deployed, I would have no problem in seeing that happen generally on international flights.

As I said to the chairman, when you take into consideration the amount of time that you're expending in the course of that travel to go overseas, to tack on an hour or so on either end I don't think is a unreasonable delay to assure security.

Mr. CLEMENT. You're not referring to domestic flights?

Mr. MCNULTY. No, I'm not.

Mr. CLEMENT. All right. Thank you.

Mr. OBERSTAR. The gentleman's time has expired.

The gentleman from Oklahoma?

Mr. INHOFE. I have done a little research on the incidents of the threats. Although these are not categorized as high level threats or low level threats, and in my own thinking I have a hard time distinguishing between the two anyway because a threat is a threat.

However, it does show that going up from 1983, it peaked out in 1986 with 367 threats against aircraft, and it also peaked out in threats against airports. Then it went down, and now it's starting back up again. So this is a very appropriate time in the cycle to address it.

It appears to me, Mr. McNulty, that you're correct in addressing those areas where a threat may have been made, but after listening to both testimonies, it seems that Mr. McCurdy's approach is you're almost assuming that there would be a threat on all of them. I kind of like that.

The incidents of actual explosions and detonations that have taken place relative to threats is an interesting study in itself, because there have been several of them where there was no threat at all.

It would seem to me, and particularly if we could use this as leverage to pick up those last five or six votes to get the trust fund off budget, that your bill, Mr. McCurdy could perform another great service for the whole country in getting that money that is there for that designed purpose spent.

It appears to me that we ought to consider that maybe instead of just addressing where a threat has taken place, maybe an assumption that there is a threat out there somewhere on all flights. For that reason, I——

Mr. McNulty. I think that's what we're doing when we're moving toward deploying the detection devices for the plastic explosives generally; it's making that assumption.

Mr. Inhofe. Yes, I think that's right. I think's a proper assumption for us to take. I thank both of you for addressing this because it looks to me like, if the pattern from the past is going to continue, then next year could be even worse than this year is.

Mr. Oberstar. The gentleman from Virginia?

Mr. Payne. Thank you, Mr. Chairman.

I want to thank also my colleagues, Mr. McNulty and Mr. McCurdy, for that very informative and helpful testimony.

I have one question for Mr. McCurdy having to do with the technology. I believe, Mr. Chairman, as you started this hearing you mentioned that the purpose of this was to put us a step ahead of the terrorists.

In terms of the legislation that you're proposing, would this in your mind put us a step ahead and, if so, does it address how we stay a step ahead of the terrorists?

Mr. McCurdy. I believe it does put us a step ahead. I think it—and I've had to learn a great deal, I think as this country has, in the past eight or ten years with respect to terrorism.

It was the bombing of the Marine barracks in Lebanon which probably awakened this country more than any other event. We were no longer dealing with countries that had ballistic missiles; that an actual threat and a very significant threat were as easily those who were driving pickup trucks or those who were claiming explosive devices in restaurants or in airplanes, for that matter.

We have improved our intelligence capability vis-a-vis the terrorists. We have a better understandings of who they are, and that's why we're able to classify the threats in a much more systematic way and to know whether or not this person is connected with some type of terrorist organization or activity.

We have improved our deterrent posture, and that is by increasing security. We for years were disturbed that, even though we improved our security, other airports in other countries were not following: Rome, for instance, where we saw they had very lax security; Athens, Greece; others that did not follow U.S. standards.

But we have now even moved another step further, and that is by investing considerable sums of money in the last decade into developing and enhancing the capability through technology and improved technology. This is not 100 percent effective, but it's about 95 percent. The odds are that a person would be detected if they brought these kinds of explosives through one of these machines.

Will we ever be 100 percent? I would never venture to guess that we would or to state categorically that we would, but I think we have improved dramatically. I think the awareness will continue to put pressure on authorities to improve our capability, whether it's technology, security itself, and the deterrents to those terrorists.

Mr. PAYNE. Does the bill actually address the next step, research and development beyond——

Mr. MCCURDY. That's correct. We direct the administrator to continue research in other types of technology, whether it's IM mobility spectrometry or biotechnology and x-ray. It may take a combination of technologies in order to provide the type of security that we think is essential.

We've had problems. As the chairman knows, when I chaired the subcommittee that had the R&D budget on this, we were always being squeezed by other committees and other priorities within the aviation sector, and security has to remain, in my opinion, at the top of the list.

Mr. OBERSTAR. The gentleman's time has expired.

The gentleman from North Carolina?

The gentleman from Tennessee?

Mr. DUNCAN. No questions.

Mr. OBERSTAR. The gentleman from Missouri?

Mr. HANCOCK. No questions.

Mr. OBERSTAR. The gentleman from Illinois?

Mr. COSTELLO. Mr. McCurdy, one question to clarify a point for me, please: the TNA technology, are we using that at any of our hubs now?

Mr. MCCURDY. Well, we're using it in Los Angeles. There was a test site and they've been used in tests. They've been successful. Again, the success rate is right at 95 percent.

They are slower than we would like. I think over time that technology will improve so that will be much more rapid, but it's at that stage that Administrator MacArtor last year told us in our subcommittee that he felt that it was close enough we could start using it.

Mr. COSTELLO. How many hubs do we have in this country?

Mr. MCCURDY. My calculation is 71. That's determined—there's no clear definition because the number of flights per year—I think it's—is it 2 million, or whatever the number of flights—the experts can tell us, but it's the number of flights per year in that airport that determines whether or not it's a hub. It's right at 71.

Mr. COSTELLO. The best case scenario, if we had the funds from the trust fund to implement TNA at all 71 hubs, what are we talking about as far as the time frame?

Mr. McCurdy. Well, our bill requires that it be done within a year and a half, if the administrator—again, that's a schedule of actual development.

The contractors—and, again, a contractor in my district has nothing to do with local interests—the contractors has informed our subcommittee that they could be producing at a rate that within two or three years they would have sufficient numbers of——

Mr. Costello. And the cost, my understanding is, about $750,000.

Mr. McCurdy. That's $750,000 per machine. Again, I think if you get the per unit rate of production up sufficiently, experience would show that that cost would decrease over time.

Mr. Costello. Thank you.

Mr. Oberstar. The gentleman's time has expired.

The gentleman from Georgia, Mr. Jones?

Mr. Jones. Mr. Chairman, my questions have been answered. I would like to thank my colleagues for their valuable and incisive testimony today.

Mr. Oberstar. I thank the gentleman.

The gentleman from Georgia, Mr. Lewis?

Mr. Lewis. Thank you, Mr. Chairman.

I don't have a question, but I would like to commend and thank my colleagues for their statements.

Mr. Chairman, this is my first meeting of this Aviation Subcommittee. I think I'm the newest member. I'm here to learn and listen.

Thank you.

Mr. Oberstar. We thank the gentleman. We welcome him to the subcommittee. I'm glad to have his—he may be new, but he's an experienced in-fighter and we're glad to have him.

We thank you very much for your very valuable testimony and appreciate your insights into the issues pending before the committee.

The bill that Mr. McCurdy has introduced, we will take a very careful look at that. That is something we think is very interesting. We would like to work with you on that legislation.

Mr. McCurdy. Thank you, Mr. Chairman. I certainly welcome that effort and that support.

I would also indicate to Chair and the committee that I now chair the Oversight and Evaluations Subcommittee of the Intelligence Committee. I would extend an opportunity to work with you and a hand to work with you in the future in making sure that all the relevant agencies of the Federal Government are involved as much as possible in fighting this——

Mr. Oberstar. I appreciate that. I think it underscores the point that will recur throughout the hearing—that no one agency of Government, no one entity of the public sector, and certainly no one entity in the private sector can solve this problem alone. It's going to take all of us working together, and the more talent we apply, the better the results are going to be.

Mr. McNulty, thank you very much for your testimony and for your very deep and genuine concern for your constituents, the families of the victims of PanAm 103.

Mr. McNulty. Thank you, Mr. Chairman.

[The prepared statements of Mr. McCurdy and Mr. McNulty follow:]

### STATEMENT BY REPRESENTATIVE DAVE MCCURDY

Mr. Chairman, I appreciate the opportunity to testify on the Airport Security Technology and Research Act of 1989, which I am introducing today, along with my colleagues Tom Lewis and Dan Glickman.

We are witnessing an attack by international terrorists on innocent victims, commercial aviation, and the traveling public. Terrorists attack with no warning and no rationale. Their weapon of choice is a pliable, ordorless substance that is twice as powerful as TNT and is virtually invisible to conventional security devices. It can be hidden in a brief case or a small cassett recorder. We were reminded of the deadly nature of plastic explosives like SEMTEX when Pan Am flight 103 exploded over Lockerbie, Scotland last December. A total of 270 people died that day.

Unfortunately we can not change the tragedy of the Lockerbie incident. We can, however, fight back against the use of plastic explosives. Thermal Neutron Activation is a mature technology that has been proven to have 95% accuracy in detecting plastic explosives. During the recent hearing held by the Committee on Science Space and Technology on which I serve, Allan McArtor stated, with respect to TAN, "We do not see any technical hurdles, however, we would like to see some improved performance capabilities with respect to through-put." The Federal Aviation Administration has the consolidated lab and field tests on TNA and other "sister" technologies, but, to date, has not done enough to see that this equipment be expeditiously installed in major airports throughout the United States.

As you know, the FAA has planned to deploy six TNA devices at the high-risk airports within the next year and I commend them on this effort. However, I believe that the effort needs to be accelerated and a clear agenda set for the installation of explosives detection equipment in all major airports. Terrorists are not likely to curtail their insidious acts while we debate and formulate this agenda. Therefore, the FAA should take more of a leadership role to ensure that mature plastic explosives detection equipment like TNA be installed in major airports without unnecessary delay.

The Airport Security Technology and Research Act will put into place, through the FAA's rulemaking process, deadlines for installation of detection equipment. The FAA will have 90 days after the bill is enacted to initiate a rulemaking proceeding and 180 days to issue a final rule. The final rule will require that the detection equipment be installed in major airports no later than one and a half years after enactment of the bill.

The bill requires that the FAA administrator outline: Who will purchase; who will install and operate explosives detection equipment to be used at major airports; how the equipment will be purchased and; who will pay to maintain and operate the equipment.

The agenda must be set quickly to ensure safety for airline passenger and crews from the invisible and deadly threat of plastic explosives.

The Act also calls for accelerated research and development of other technologies which may be used for explosives detection. There are about 30 contracts with the FAA for other technologies including fast neutron activation, enhanced X-ray, ion mobility spectrometry, and biotechnology. The FAA should accelerate funding for research on fast, accurate, low-cost technologies so that we can keep a step ahead of the threat that terrorists pose to commercial aviation.

Mr. Chairman, it is obvious that airport security is just a part of stopping terrorism. We must work with United States intelligence agencies and encourage cooperation with foreign governments to put an end to terrorism. But, until the threat of terrorism no longer exists, Congress, the FAA and all those responsible for safety must use available resources to ensure safe air travel. Explosives detection equipment is an extremely valuable resource and, most importantly, it is available.

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### TESTIMONY OF CONGRESSMAN MICHAEL R. MCNULTY

Mr. Chairman; members of the committee; and family members of the victims of Pan Am Flight 103:

Thank you for allowing me to express my deep concerns about the circumstances surrounding the tragedy which occurred on December 21st of last year.

I represent the 23rd district of the state of New York—the capital district of the state.

Mr. and Mrs. Paul Hudson reside in Albany, which is in my district. Their 16 year old daughter, Melina, was on board that flight. Mr. and Mrs. Joseph Hartunian, of Niskayuna, lost their 22 year old daughter, Lynne.

In addition, other area families suffered in this tragedy. Mrs. Barbara Primeau of Greenwich, lost her twin sons, Eric and Jason Coker, who were 22. Mr. and Mrs. Anthony Nucci of Hudson lost their 22 year old son Chris. Mr. and Mrs. Rafferty of Ticonderoga lost their 21 year old daughter, Bonnie Rafferty Williams, as well as their son-in-law, Eric, 24, and their two granddaughters, Brittany, 2 months, and Stephanie, 19 months. Mr. Edgar Eggleston's son, Edgar III, of Glens Falls, was returning to visit his mother, who was terminally ill with cancer. She died two days after her son, on December 23.

We have a responsibility to those 259 people, the 11 in Lockerbie, as well as their families and friends, to do all that we can to insure that such a tragedy never occurs again.

I have written Secretary Skinner and acting FAA Administrator Whittington concerning the manner in which certain aspects of the tragedy are being addressed, as well as the steps that should be taken to assure the future security of airline passengers.

Specifically, I have requested that in the future, when "high level" warnings are issued, the information should be given to the public. Also, the technology which is available to detect plastic explosives should be deployed with all deliberate speed. This should be a top priority. In the interim, manual searches should be conducted on international flights whenever a threat is suspected.

Additionally, family members are anxiously awaiting the return of the personal effects of their loved ones. All identifiable personal effects should be released immediately to the victims' relatives. The United States government must take the responsibility to implore the Scottish authorities to comply with this request without further delay.

Details were released last week by the FAA that an "aviation security bulletin" was released on November 18, a full 4 weeks before the tragedy. The Toshiba cassette recorder, equipped with a barometric detonating device, was described, and a photo issued, referring to the anti-terrorist sweep by West German police on October 23rd, in which a similar recorder was confiscated. British authorities issued a British air carrier only warning on November 22nd. A phone call warning of an impending bomb attack was placed to the U.S. Embassy in Helsinki. It was dismissed as a crank.

A second warning was released on December 19—two days before the attack, referring to the "previous telex". Incredibly, the U.S. airlines operating out of Britain did not receive a copy of this until sometime between January 16 and the 19th. This is deplorable and must never happen again.

I share your concern, Mr. Chairman, that airline security must be improved and that future communiques' concerning possible attacks not be dealt with in the same manner.

I would like to submit for the record a copy of the statement issued by the families of the victims on February 6th.

I also intend to introduce a resolution expressing the sense of the Congress about this matter, and aspects of my previous testimony.

Thank you for permitting me to testify. I join you in the hope of preventing another such tragedy in the future.

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## GENERAL STATEMENT ISSUED BY FLIGHT 103 VICTIM FAMILY MEMBERS

We are relatives of some of those innocent persons murdered in this wanton attack on Pan Am Flight 103, the most massive terrorist attack in history aimed at American civilians. During the past six difficult weeks, not only have we had to accept the senseless death of our loved ones, we were forced to confront the bureaucracy to have the remains of our loved ones returned, we have arranged for funerals, and attended along with over 160,000 others, numerous memorial services in Syracuse, New York City, and Lockerbie, Scotland, and scores of other cities and towns in the United States. We have had the support and sympathy from grieving relatives, friends, members of our communities, and indvidual airline employees. We have collectively received several hundred thousand cards and letters of condolence. The outpouring of sharing has been a great comfort to us.

However, there has been one quarter from which the response has been utter silence. We have received no condolences from the top officials of Pan Am nor the leaders of our national government. Unlike the British Government leaders, our

President, Vice President, Secretary of State, and Secretary of Transportation have not attended any of the memorial services that were held. Not even 2nd level U.S. officials have been present. But most disturbing to us has been the utter silence of our national leaders over the past 6 weeks. Our numerous letters are now answered, we see no sign of action, we are not being informed of any events which would lead to answers to the many questions that remain. The question must be asked: Can it be that the U.S. Government policy is to ignore the Flight 103 bombing by doing little or nothing?

In the immediate aftermath of the Flight 103 bombing we were shocked to learn that the FAA (Federal Aviation Agency) had issued written alerts of a terrorist threat to bomb a Pan Am flight originating in Frankfurt during the pre-Christmas holiday period. These warnings had apparently been sent to U.S. embassies, the airline, British officials, and the U.S. military personnel in Frankfurt, however, the warning alert was not available to passengers or crew of Flight 103. President Reagan when asked about this policy of keeping warnings, even high level alerts secret from the public, asserted that so many threats are received that to make them available to the public could stop all air traffic. The FAA's own reports, however, show a relatively small number of threats to aircraft (400–500 per year out of 6 million flights) and a very small number of high level threats (variously reported at 22 to 24 in all of 1988). The threat to Pan Am Flight 103 after December 5th was apparently classified as such a high level threat. While the number of people who knew of the FAA terrorist alert is not known at present, the approximately 168 vacant seats on this usually crowded pre-Christmas flight indicates the distinct possibility that the alert was more widely known than has yet been reported.

Both the State Department, and the Transportation department promised in late December a "review" of the policy on warnings, but the policy (or lack of policy) apparently remains intact and nothing further has been heard of this "review".

We believe the present defacto policy of issuing warnings of terrorist threats to government agency employees while withholding such alerts from the flying public and the flight crews is both immoral and possibly criminal and it must be roundly condemned. We call on U.S. Transportation Secretary Skinner to disavow this FAA and airline policy forthwith, and to make available upon request to any perspective international air passenger a current summary of FAA alerts or reported threats to aircraft, and to require notification of flight crews.

The anger felt by many of us about suppressed warnings has been heightened by revelation that airline security measures cannot generally detect plastic bombs in the checked baggage. While the FAA and the airline have apparently known of this massive security gap since 1986 and the FAA has ordered new equipment to detect such bombs, no interim measures to detect such bombs were undertaken, apparently for reasons of commercial convenience.

Many questions need answers—How would warnings or alerts be suppressed when the FAA and airlines knew that their security measures were ineffective? By what right, and on whose authority, was the information on ineffective security measures and specific terrorist bomb threats kept from the public and flight crews? Why has the FAA and Pan Am still refused to institute effective security measures to detect plastic bombs in luggage compartments? (The FAA regulations issued on December 28, 1988 following the Flight 103 bombing call merely for X-rays of all luggage, which cannot with current equipment detect plastic bombs.)

It is also time for accountability as well as answers. We call on Secretary of Transportation Skinner, to demand the resignation of FAA Administrator McArtor, whose poor judgement is principally responsible for the present dangerous condition of airline security. His policies have placed the security of our loved ones and all international air travellers, in the hands of the terrorist groups, who attack the United States by striking at innocent civilians on American overseas air carriers.

We would like not to turn to some sensitive matters of direct concern to most relatives. The handling of the remains of unidentified victims and the indefinite delay on return of the personnel efforts of property. (Personal effects refer to very personal things removed from a body or found in the immediate vicinity of a body.)

A funeral service was held last week in Scotland for a number of victims whose bodies had not been fully recovered or identified. Unfortunately, only short notice or no notice was given to a number of American next of kin.

While family members were originally told in the week after the crash that personal effects would be returned to the next of kin with the bodily remains, and other property would be identified and returned by Pan Am, Scottish authorities subsequently ruled that they would handle these matters. Scottish authorities have stated that personal effects and property of Americans will be turned over to the U.S. State Department rather than released directly to the next of kin. Despite our request, no personal effects or property has been returned to the next of kin on the grounds that these items may be needed in the criminal investigation of future criminal cases. While we appreciate that there may be good cause to hold some luggage found near the bomb blast, we believe the personal effects removed from the identified bodies should be returned to the victim families within the next week. Other victim property which is stored in a large factory warehouse in Lockerbie, should also be identified and returned. To date, despite several requests, no lost luggage forms have been sent to victim family members to accomplish this task. We call on the Scottish authorities, especially Scottish Home Secretary Malcolm Rifkind and the Scottish Lord Advocate, Lord Cameron of Lochbroom, to promptly authorize the release of victim personal effects and expedite the identification and return of other property.

In conclusion, we call on President Bush to act on the ideals he has championed. Please, Mr. President, break your silence and exercise your leadership to redouble the efforts of the Federal Government to identify and apprehend the perpetrators of this, the worst terrorist attack in history on American civilians. Use your power to restore genuine security for Americans travelling on American international air carriers. End the Government's present immoral policy of providing selective warnings and alerts to certain favored persons while keeping the public and airline employees whose lives are at risk in ignorance.

To the Congress which will decide the degree to which it will investigate the Flight 103 bombing over the next several weeks, we urge you to conduct a full and complete investigation. Unlike most accidental air crashes, where the role of the FAA itself is not at issue, this case demands a full independent investigation of FAA's actions on the security and warning issues. We particularly call on Senators Frank Lautenberg (N.J.), Alfonse D'Amato (N.Y.), Daniel Patrick Moynihan (N.Y.), and Members of Congress Glenn Anderson, Norman Mineta, William Lehman, and Cardiss Collins who by virtue of their committee and sub-committee chairmanships have a special leadership role in the issues involved in the Flight 103 disaster.

Mr. OBERSTAR. Our next witnesses are a panel of experts in security issues in aviation. Those have been very close to this most recent incident and very serious problem of the destruction of Pan Am flight 103.

Again, the point of our hearing is not to inquire into a specific incident, but to look into the basic issues involving security.

The Chair will now call Mr. Monte Belger, Associate Administrator for Aviation Standards of the FAA; Mr. Raymond Salazar, Director, Civil Aviation Security for the FAA; Ambassador Clayton McManaway, Associate Coordinator for Counter-Terrorism at the State Department; and Ms. Irene Howie, Assistant Chief Counsel for International Affairs and Legal Policies for the FAA.

Mr. OBERSTAR. We thank you very much for being with us this morning. I see there are two additional panelists. Mr. McManaway, are they on your team?

Ambassador McMANAWAY. Yes, Mr. Chairman. I would like to introduce——

Mr. OBERSTAR. Would you introduce them? Thank you very much.

Ambassador McMANAWAY [continuing]. Two colleagues from the Department of State. To my immediate left is Ambassador Bob Ryan, who is the Deputy to the Assistant Secretary of State for Consular Affairs; and on his left Gene Griffith who is the Director of the Office of Aviation Policy, the Bureau of Economic and Business Affairs in the Department of State.

Mr. OBERSTAR. Thank you very, very much.

Mr. Ambassador and Dr. McManaway, since we have two, I would like to express a personal welcome and appreciation for your participation. For my colleagues on the committee, I might say I came to know Ambassador McManaway some years ago when he was serving as U.S. ambassador to Haiti in one of the most difficult and yet one of the most rejoiceful periods of time when Haiti was free from the despotism of the Duvalier family.

Ambassador McManaway was our man on the spot, handling the transition, moving the Duvalier family out of the country, working with the transition to a new and at that time very hopefully a democratic regime who steered U.S. efforts in Haiti to bring about a peaceful transition without bloodshed and one that yet I hope will lead to democracy in Haiti.

He served this country with great distinction in one of its most difficult periods and one that could have been explosive, but instead was a very peaceful transition.

Ambassador **McManaway**. Thank you, Mr. Chairman.

Mr. **Oberstar**. Mr. Belger, we would like to take your statement first and then we'll proceed to Ambassador McManaway.

## TESTIMONY OF MONTE BELGER, ASSOCIATE ADMINISTRATOR FOR AVIATION STANDARDS, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY RAYMOND SALAZAR, DIRECTOR, CIVIL AVIATION SECURITY, FAA, AND ARLENE HOWIE, ASSISTANT CHIEF COUNSEL FOR INTERNATIONAL AFFAIRS AND LEGAL POLICY, FAA; AND AMBASSADOR CLAYTON E. McMANAWAY, JR., ASSOCIATE COORDINATOR, OFFICE OF THE AMBASSADOR AT LARGE FOR COUNTERTERRORISM, DEPARTMENT OF STATE, ACCOMPANIED BY AMBASSADOR BOB RYAN, ASSISTANT SECRETARY OF STATE FOR CONSULAR AFFAIRS, AND GENE GRIFFITH, DIRECTOR OF AVIATION POLICY, BUREAU OF ECNOMIC AND BUSINESS AFFAIRS, DEPARTMENT OF STATE

Mr. **Belger**. Thank you.

Mr. Chairman and members of the subcommittee, I am Monte Belger, the FAA's Associate Administrator for Aviation Standards. With me is Mr. Raymond Salazar who is our Director of Civil Aviation Security and Ms. Trene Howie who is our Assistant Chief Counsel for International Affairs and Legal Policy.

With your permission, I would like to make a very brief statement at this point and my formal statement submitted for the record.

Mr. **Oberstar**. Without objection, the complete statement will be included in the record. You may summarize as you wish.

Mr. **Belger**. Despite efforts to strengthen security procedures, civil aviation continues to be a target for and vulnerable to criminal and terrorist acts. The criminal destruction of Pan Am flight 103 tragically reminds us that there is much to be done to thwart cowardly and despicable acts of terrorism. There is no higher priority in the FAA.

The challenge we face is complex. We must continue to find ways to bring our best technology and our best people to attack this problem.

As I described in my prepared statement, we have in place an intensive program to combat criminal acts against civil aviation. We conduct an aggressive program of foreign airport assessments as called for in the International Security and Development Cooperation Act.

Since the inception of this program in 1986, we have conducted roughly 800 assessments of 216 foreign airports in over 100 countries. We believe this program has aided in attaining security improvements at many foreign airports.

The Act enables us to conduct assessments, provides general guidance concerning the nature of assessments to be conducted and prescribes a workable and appropriate approach toward public notification of uncorrected problems at foreign airports—all of this in a manner which highlights the need for a cooperative approach toward solving security problems.

We have, as has been discussed, accelerated the delivery schedule of the thermal neutron analysis units we have ordered for explosive detection. This system is the result of three years of FAA-directed research on an explosive detection system that has the capability to detect commercial and military explosives which might be concealed in checked baggage and air cargo. The first TNA system will be installed at JFK Airport in June.

Research is also continuing on an explosive vapor detection system for checking people for explosives. We hope to have an improved device available for testing late this year.

We're also continuing to develop improved weapons detection capabilities and are evaluating state-of-the-art detection equipment. We will continue to encourage new ideas from the scientific and academic community to develop better technology.

We are working in the international arena to develop an effective international approach to end terrorism in the skies. Last month I had the opportunity to accompany Secretary Skinner at a council session of the International Civil Aviation Organization called specifically to address the sabotage of Pan Am flight 103. As a result of that meeting, the 33-member ICAO council unanimously adopted a resolution setting out a plan of action that I am confident will lead to strengthened security procedures throughout the world.

Last week Secretary Skinner also announced changes to FAA regulations which will require foreign airlines to submit their security plans to the FAA for review. I think the FAA will now be in a better position to insure that security precautions used by foreign airlines serving the United States are adequate.

We have established the past several years a better framework for the assessment and dissemination of threat information. In the past several days we have become aware of matters that question the efficiency of this system. To determine what more can be done to improve this system, Secretary Skinner has dispatched a team of his personal representatives to Europe to assess the effectiveness of our information exchange and dissemination process.

The evaluation will look at ways to improve the timely exchange of information related to threats against civil aviation, and I believe the team will report to Secretary Skinner as early as the end of this week.

In closing this very brief statement, Mr. Chairman, I would like to emphasize my commitments and the commitment of my staff and all of FAA to stop the threat of criminal actions directed against civil aviation. We face an extremely difficult challenge, but one that we must meet.

I thank the subcommittee for its support of the FAA's aviation security efforts and I look forward to working with each of you on these key issues which obviously are so important to all of us.

Thank you, Mr. Chairman. We'll obviously be glad to try to answer any questions.

Mr. OBERSTAR. Mr. Belger, do any of the other members of your FAA team have a statement to make at this point?

Mr. BELGER. No, sir. We'll be glad to respond to questions that you may have

Mr. OBERSTAR. Fine, fine.

Ambassador McManaway, we would like to have your statement at this point.

Ambassador McMANAWAY. Thank you, Mr. Chairman. I, too, would like to summarize my statement and submit the full statement for the record.

Mr. OBERSTAR. Please proceed. Thank you.

Ambassador McMANAWAY. Mr. Chairman and members of the committee, thank you for the opportunity to appear before this committee.

In keeping with the general focus of this hearing, I will limit my testimony to reviewing three broad issues: the U.S. Government threat assessment and public notification system regarding threats to civil aviation; the Department of State's diplomatic research and training efforts to help prevent a repetition of the Pan Am 103 tragedy, and the ways that we incorporate aviation security concerns into our bilateral civil aviation agreements.

The callous destruction of Pan Am flight 103 on December 21, 1988 was a terrible international tragedy. All of us deeply regret the loss suffered by families and friends of those on Pan Am 103 and the people of Lockerbie.

Let me assure all concerned that everything possible is being done to investigate this incident, bring to justice those responsible, and enhance aviation security to help prevent a repetition of this tragic event.

Mr. Chairman, a central issue in countering the threat posed by terrorism involves assessing and disseminating information on possible terrorist threats. I would like to use this opportunity, if I may, to clarify what we knew about these threats, when we knew them, and what we did with the information and why.

First, the so-called "Helsinki threat", which was a threat made in an anonymous telephone call to our embassy in Helsinki on 5 December. It was reported to Washington and the FAA issued an aviation security bulletin on 7 December. The threat was to a Pan American flight from Frankfurt to the United States during the subsequent two-week period. A bomb was supposed to be carried onto the plane by an unsuspecting Finnish woman. Note that no specific flight number, date, or itinerary was provided. There was no threat, not even a false one, specific to Pan American 103.

By 10 December the Finnish authorities determined that this threat was a hoax. However, we left in place the enhanced security for the period. We did not relieve the enhanced security measures that were taken.

In the wake of the Pan Am bombing, this so-called threat was thoroughly reinvestigated by the government of Finland, the United States Government, and other concerned governments. It is our unanimous conclusion that the Helsinki threat was baseless. In this case, however, the threat was a horrifying coincidence with what someone else did to Pan Am 103.

Concerning the threat from the PFLP General Command, CPFLP-GC in late October 1988 West German authorities arrested 14 suspected members of this terrorist organization. In November we learned that among the evidence seized during those arrests was a bomb hidden in a Toshiba radio and which included a barometric pressure triggering device. The FAA issued on 18 November an aviation security bulletin to U.S. carriers to warn them about the presence of these terrorists in Europe, the existence of this bomb, its characteristics, and to advise that increased security measures should be introduced to counter the potential threat of such a bomb. This bulletin remains in effect today.

Mr. Chairman, this was a general warning. It was not a threat to any specific airline or specific flight.

In view of the publicity that these two aviation bulletins have received and their possible links to the destruction of Pan Am 103, I would like to emphasize several critical points about them. There is no connection between the Helsinki threat which turned out to be a hoax and the bomb made by the PLFP GC. There was never any threat specifically made to Pan Am flight 103 on 21 December or any other date.

The Helsinki threat, as I have said, was a hoax. It had no relation whatsoever to the bombing of Pan Am 103.

In explaining how we react to possible threats to civil aviation, may I take a moment to describe the broader context of how the United States analyzes terrorist threat information? Mr. Chairman, I might say that some of this I can go into in greater detail in the closed session.

Mr. **Oberstar**. Please do. Before you go on, since members will have questions, may I ask you at this point to elaborate on how the Department knew that the Helsinki threat was a hoax?

Ambassador **McManaway**. This was the result of the investigation by the government of Finland and work with our intelligence services.

The caller was known to the government of Finland. He had made similar calls to the Israeli embassy making similar threats. It was determined that he was able to concoct his story simply by using available unclassified information about flights.

This has now been reinvestigated by our Government, the government of Finland, the German government, the Israeli government, and all four governments agree that it was baseless.

Mr. **Oberstar**. The other governments, governments other than the United States and Finland, concurred in the designation of that threat as a hoax?

Ambassador **McManaway**. Yes, sir, correct.

Mr. **Oberstar**. Please proceed.

Ambassador **McManaway**. I will try to be even briefer than I've been. It's taking a little bit too long here.

Mr. **Oberstar**. No, you're not taking too long. It's very important——

Ambassador **McManaway**. All right, sir, I'll continue then.

Mr. **Oberstar** [continuing]. That you get to elaborate on these points.

Ambassador **McManaway**. Our system for analyzing terrorist threats is based on a comprehensive national level process which responds to threat information received by any concerned U.S. agency and assures that this information is acted upon in a timely manner.

The objective of the system is to review and forward terrorist threat alert or advisory information quickly to those responsible for countering terrorist actions. Again, I can go into more detail on that in the closed session.

The national level system also includes a provision for alerting the general public of specific and credible terrorist threats via Department of State public travel advisories. We also use travel advisories in conjunction with the FAA to advise the American public in those situations in which aviation security in a given airport is deemed inadequate to ensure the security of passengers.

Aviation security bulletins are issued by the FAA and advise aviation security officials at U.S. carriers and elsewhere of information they need to help insure the safety of U.S. air carriers operating throughout the world.

The Department of State repeats these cables to posts affected by the bulletin so that specified officials at our diplomatic posts can assist the U.S. carriers in obtaining the cooperation of the host government in increasing security measures as appropriate. Such bulletins are not advisories to U.S. Government personnel.

Mr. Chairman, I want to assure you, this committee, the Congress, and the American people that there is not and cannot be a double standard between the travel security information available to official personnel overseas and to the American public. Let me reemphasize. If we have a specific and credible threat to civil aviation security which cannot be countered, we will strongly recommend to the air carrier that it cancel the threatened flight. If necessary, beyond that, we will issue a public travel advisory to alert the American traveling public to this threat.

Turning now if I may, to the second broad range of issues before the committee, the Department of State has been active on the international front to help prevent another Pan Am 103. A special meeting of the Terrorism Experts Group of the Summit 7 was called in response to the Pan Am 103 bombing.

At that meeting, the United States delegation argued forcefully that the bombing of Pan Am 103 demonstrated the urgent need for upgrading air security measures worldwide. There was general agreement among the Summit 7 representatives that the threat to air travel is not limited to American carriers and that the International Civil Aviation Organization is the appropriate forum for strengthening worldwide civil aviation security standards.

Further, the experts agree that discussions should begin on the possibility of an international convention that would call for tagging plastic explosives.

Following this meeting, the United States and Britain called for special ministerial level meeting of the ICAO council to discuss Pan Am 103. This meeting was held February 15 to 16. Secretary Skinner of the Department of Transportation led the U.S. delegation.

*Emerging from that meeting was a comprehensive work plan* which will result in ICAO developing new security procedures to help prevent a repetition of the Pan Am tragedy.

To advance the exchange of information on the complex topic of tagging explosives, the United States hosted in Washington on 2 and 3 March a meeting of explosive experts from a number of allied states. The United States also participated in similar meetings held earlier this month under ICAO auspices in Montreal.

Whether it will be possible to negotiate an international agreement regarding taggants remains to be seen, but the common recognition by governments throughout the world that something more needs to be done to increase security from terrorist bombs represents a major step forward.

In terms of our own direct activities, the Department of State funds counterterrorism research and development which includes projects to help prevent aircraft sabotage. This national, interagency counterterrorism R&D program is coordinated with nearly 30 Federal agencies. The FAA is one of our most important partners in this endeavor.

In fiscal year 1990 the Department of State is seeking $6 million to support this interagency program which provides seed money for a range of research and development programs which otherwise would not be funded by any particular Federal agency.

Included in this R&D program are projects to develop less expensive and more widely applicable detectors to identify plastic explosives. I would hope that the members of this subcommittee could support this funding request during House consideration of the Commerce/Justice/State appropriations bill.

If I might just digress for a moment to say that I was greatly encouraged by the comments by the Members of Congress who testified here before us on the importance of R&D in this area of counterterrorism. It's a continuing problem. Questions were asked about, are we going to get a step ahead? The TNA will get us current, but we have to keep looking ahead, keeping working ahead, because the plastics themselves are going to change.

The Department of State also offers a training program for foreign civil aviation security officials through its anti-terrorism assistance program. Since its inception in 1983, the ATA program has trained over 650 students from 28 nations in advanced civil aviation security or airport police management.

A final set of issues relevant to consideration today is our bilateral civil aviation agreements. The Department has sought improved security for international air travel by including security articles in each of the aviation bilateral agreements the United States negotiates with our foreign aviation partners. My testimony indicates the various elements of those agreements.

Since 1985 when the United States began this effort to incorporate these provisions into our bilateral civil aviation agreements, these modifications have come into effect with 22 nations and agreement on text has been reached with another 27 countries. We are working now on incorporating these changes into these agreements with more than 30 other States.

Mr. Chairman, in closing let me say that preventing another tragedy such as the Pan Am 103 bombing is now and will remain a permanent preoccupation of the concerned agencies of the U.S. Government. With regard to those responsible for Pan Am 103, I am confident that we will eventually identify them and that we will then do everything in our power to bring them to justice.

Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Ambassador. I assume your associates do not have prepared statements but are here as resource for questioning.

Thank you very, very much for that enlightening presentation and for the specific response to the question about the so-called "Helsinki threat." That's a matter that continues to gnaw away at the conscious and at the troubled souls of the families who survive the tragedy of Pan Am 103, and I think that's certainly a matter that will continue to be explored in time ahead.

The question that we all have in mind is that raised by your testimony on page 6 and throughout this incident, and that is, quoting your statement, Mr. Ambassador, "If we have a specific and credible threat to civil aviation security which cannot be countered, we will strongly recommend to the air carrier that it cancel the threatened flight."

Has that ever been done?

Ambassador McMANAWAY. No, sir. One of the reasons——

Mr. OBERSTAR. There have never been situations where there has been that kind of credible threat?

Ambassador McMANAWAY. That's one of the problems, frankly, that I think some of us would have with some of the ideas that have been put forward which are totally aimed at the right objective, and that is making sure our people are protected.

If you look at the 20-odd FAA bulletins that were issued last year many were not specific as to flight number or itinerary. It would be difficult to—for example, again coming back to the so-called threat and the call to the Helsinki embassy, Pan Am offers over 50 flights a week from Frankfurt to the United States. We don't get them—the reason we haven't done them is that we don't get them that specific.

Mr. OBERSTAR. What constitutes a credible threat? I read your testimony at length last night. I've read the statement of the FAA analyzing the situation in Helsinki, the number of flights, the fact that there wasn't a specific reference. How do you evaluate, how does our intelligence system evaluate threats and determine from all available evidence whether one or another of them, whether one or another of those 639 issued against domestic U.S. airports and carriers is a credible threat?

Ambassador McMANAWAY. I think you start with the organization that's claiming to make the threat. We have people now in all of our agencies who have developed a considerable depth of knowledge of the various terrorist organizations operating in the world. That would be one criterion.

Another criterion would be the specificity of the threat, the language used. Does it meet the MO of that organization? Is it aimed at a specific flight, flight number? Is there an itinerary involved?

If we had all of those things and could see no way to counter the threat—that is, round up the terrorists, for example—then we take steps to get the flight cancelled.

Mr. **Oberstar**. Is preventive detention a step taken or recommended to be taken when a threat is made and a person or persons of one of the questionable organizations such as one of the Palestinian groups—and we know that they have terrorist activities, we know that they are equipped to plant these kinds of exotic or esoteric destructive devices—when one of them shows up at an airline counter and a warning is given, "Don't board this person," is preventive detention a recommended step or procedure?

Ambassador **McManaway**. Yes, sir, it would be from me. I have to look carefully at how much and how far I can go in an open session, but coming back to the threat in Germany and the arrests that were made, the 14 suspected members, that arrest was made because it was believed that they were about to do damage to a flight, not of a U.S. carrier but of another foreign carrier.

Mr. **Oberstar**. Thank you.

Mr. Belger, a few years ago the Secretary of Transportation, following the procedures outlined in legislation Congress enacted, issued a warning for Americans not to use the Athens airport, literally shutting Athens down to Americans, to phrase it rather loosely.

What were the criteria used, what was the extent of the security threat that prompted the Secretary to take that action?

Mr. **Belger**. I think, Mr. Chairman, that warning was a State Department advisory.

Mr. **Oberstar**. It was a State Department——

Mr. **Belger**. I believe so.

Mr. **Oberstar**. I'm mistaken.

Mr. **Belger**. I think that it was the result of an FAA assessment.

Mr. **Oberstar**. It was certainly the result of an assessment that the airport was not secure.

Mr. **Belger**. That's Right. The FAA has, in the course of our foreign assessment programs, recommended that certain countries beef up their security programs. In one instance an advisory was made public as a result of our foreign airport assessments.

Mr. **Oberstar**. Ambassador McManaway, could you comment further on the Athens situation? I think it's instructive for us. There were criteria used in that situation to determine that the airport was not secure and the Secretary issued the directive for Americans not to use that airport until the Secretary determined it was secure. The government of Greece responded. Athens airport security was beefed up, and after some period of time it was reopened to American use.

Ambassador **McManaway**. The notice to the American public not to use the airport at Athens followed on the heels of the hijacking of TWA 847 and the actions that were not taken by the government of Greece to help us with that. It originated there. It evidenced a lack of security at the airport, and there were other actions taken during the resolution of that incident which we didn't think indicated a very strong stance against terrorism at that time.

Mr. **Oberstar**. Was it that there were not enough security screening devices in place, that the personnel at the airport were not trained sufficiently?

Ambassador **McManaway**. Probably a combination of those, Mr. Chairman. It was clearly loose security that allowed the hijacking to originate there.

Mr. **Oberstar**. Now the FAA conducts security assessments of foreign airports. I believe 107 foreign airports have been assessed in the last year. That has involved a great deal of travel and reviewing of security conditions.

I think if there is a pattern, one of them is that foreign governments do not consider perimeter security as seriously as we do in the United States. Many of those, or at least some of those governments have not responded, some have, to recommendations from the FAA that perimeter security be provided.

Mr. Belger or Mr. Salazar, could you respond to the principal findings of your foreign airport assessments? Then I have a further question, and I'll conclude.

Mr. **Belger**. Thank you. If I could just respond in general and then Mr. Salazar could follow up with the specifics.

Let me highlight our foreign airport assessment program. There are currently over 250 airports that meet the assessment requirements. Since 1985, we have conducted almost 800 assessments. The types of recommendations that we have made as a result of those assessments range from recommendations to deal with the screening system, to law enforcement support, to checked baggage control, and cargo procedures. Probably the majority of the recommendations have to do with local airport security programs and controls on access.

Mr. **Oberstar**. Excuse me, I was distracted for a moment on an administrative matter. Would you repeat just the last sentence?

Mr. **Belger**. Certainly. As I was saying, the recommendations that we have made to the foreign countries as a result of the foreign airport assessments run a broad range from recommendations to improve the screening, to cargo procedures, to law enforcement support. Probably the two areas in which we have made the most recommendations would be the existence of or the quality of airport security programs and access controls—in other words, controls to insure that only authorized people have access to secured areas of an airport.

Mr. **Oberstar**. Have you found in the process of those assessments that foreign governments are installing appropriate technology such as that the United States is developing to detect these increasingly sophisticated and esoteric types of explosive devices?

Mr. **Belger**. Well, explosive detection technology, frankly, is just now emerging. I'm relatively confident that the FAA and the Federal Government of the United States are in the forefront in terms of implementing that type of technology.

I am not aware of any other country that is to the point that we are, where we are about to have an operational explosive detection system.

If I could further expand on that. Although, I clearly believe the United States is way out in front, we do participate with several other countries both on a bilateral and on a multinational basis to exchange information, to insure that we are providing to the appropriate people the questions, the answers, the technology that we have developed. I think we have learned a great deal as a part of our participation in those agreements.

Mr. OBERSTAR. Thank you. I'll have further questions about the assessments and how you work with foreign governments and the problem of access to airports, but my time has expired.

I call on the gentleman from New York, Mr. Molinari.

Mr. MOLINARI. Thank you, Mr. Chairman. I have to leave in a little bit, but I do have a couple of questions I would like to ask.

In the testimony that was provided to the subcommittee by the Air Transport Association, they have strongly suggested that more of FAA security resources and personnel be dedicated to high risk airports overseas. What is your response to that recommendation?

Mr. BELGER. I'm very much aware of that recommendation. I am sensitive to it. We are in the process of increasing our staffing this year by about 50-some positions. Our fiscal year 1990 budget request includes a request for an additional 120 positions in our security program. We obviously are pleased by that. We are taking a very, very hard look at the proper locations for these additional individuals.

I think we should also keep in mind, though, that we have the flexibility and, in fact, exercise it whenever we need to, to use our workforce wherever the priorities might be. In the past several months we have conducted a large number of special inspections in Europe and the Middle East. We have used our inspectors from the United States to complement the small staff that we have in Europe.

We clearly need to make the decision that our resources are in the proper location to do the best good.

Mr. MOLINARI. I'm not sure whether that means that you agree with the ATA's recommendations or agree in part. Let me ask it in another fashion: is there some portion of their recommendation that you do not agree with?

Mr. BELGER. Certainly not in terms of intent. We would have to talk about the degree of how many people obviously, but I certainly agree with the philosophy, the logic of having our security inspectors in the locations where they can be of the most value.

Mr. MOLINARI. Under the Foreign Airport Security Act of 1985, DOT must notify the public if deficiencies are found in the security at a foreign airport and not corrected in 90 days. How many public notices has DOT issued under this law?

Mr. BELGER. One. That process has proceeded to that point only once.

Mr. MOLINARI. Which case was that?

Mr. BELGER. That was in the Philippines.

Mr. MOLINARI. Can we—go ahead, I'm sorry.

Mr. BELGER. When the public notice was made, in a matter of a very short period of time the corrections were made. We were satisfied that security procedures were altered—corrected I should say—and the advisory was lifted.

Mr. Molinari. Do we assume from that that all foreign airports are safe and secure for our travelers?

Mr. Belger. There are no advisories in existence now. I think we could assume that in the course of our assessments we will continue to apply the international standards. If an airport's security procedures do not measure up to those standards, we have no hesitancy in implementing the process.

Mr. Molinari. I have one further question at this point. Could somebody bring this down to the table?

Mr. Belger. I have a copy of that.

Mr. Molinari. You have a copy?

Mr. Belger. Yes, sir.

Mr. Molinari. All right. I'm a little confused in looking at this chart which is labeled "Federal Aviation Administration Security Bulletin Process." This details the various steps for sources of threat information and then the analysis of and processing of that information, and then finally a determination along the line as to whether it's considered—on the chart we say "travel advisory."

Wherein would you have high level risk inserted in that chart if you found that to be the case?

Mr. Belger. If I could just go through the process briefly in terms of how the FAA receives and assesses information, and I will then answer your question specifically.

Mr. Molinari. Okay.

Mr. Belger. I would like to do this with the clear commitment from the FAA and from the Secretary of Transportation that there still are a lot of remaining questions, as I said earlier, about the collection, analysis, and dissemination of this type of information. That's precisely why the Secretary has his own personal team looking at it.

Let me just go through the process and then answer your question without getting into a lot more detail.

The FAA is not an intelligence-gathering organization. We receive the information from various other sources. We do have the capability, very professional capability, to assess and analyze that information as it pertains to aviation. We would obviously look at the intentions and the capabilities of certain groups who might be brought to our attention. We would then work with the other Government organizations, to assess the credibility of that information.

It is our underlying, paramount concern in the FAA to provide to the airlines as much information as we possibly can, to give them all of the tools, all of the information, to allow them to do the best job possible in detecting these types of sophisticated devices that we're talking about.

When we receive information which can be disseminated to the airlines, we have a very defined process in which we do that. It goes to the U.S. airlines, it goes to the Air Transport Association, to other Government agencies, and also to the State Department, as the ambassador explained earlier, for further transmission to the embassies and then coordination with the foreign host governments.

Whether it is this type of threat information which we receive from various sources or whether it is the over 600 bomb threats that we might be aware of every year, they are all serious. We take every one of them seriously.

In the case of those over 600 bomb threats, if that threat is specific to an air carrier, to a flight, we require that the air carriers do certain things. That's the overriding point that I would like to leave, is that they are all serious. They are all assessed. There is some action taken with every single piece of information that we receive.

It is an assessment by professionals as to what action ought to be taken.

Mr. MOLINARI. Just one last question, if I may. Before a plane takes off, the pilot does an around-the-plane check. I assume that a portion of that check has some bearing on security. Would you agree with that?

Mr. BELGER. Clearly, I think the pilot would look for ways that the aircraft may have been altered or tampered with or changed.

Mr. MOLINARI. The reason I ask that is because there's been a press release put out by the Air Line Pilots Association dealing with the Eastern problem. They're making a charge in this statement that I just received that the pre-flight walk-around is not occurring, not taking place now, and that they have videotapes to prove that, in fact, that's what's occurring.

It seems to be a legitimate question, and I would like to get your response to their charges. Are you familiar with this charge?

Mr. BELGER. No, sir, I am not personally, but I can assure you that the FAA will vigorously pursue those types of charges quickly.

Mr. MOLINARI. What I would like to do is ask you to please respond in writing, with the consent of the chairman and subcommittee members, a statement within 48 hours indicating just what steps will be taken to address that problem.

[The following was received from Mr. Belger:]

MAR 22 1989

The Honorable Guy V. Molinari
House of Representatives
Washington, DC 20515

Dear Mr. Molinari:

I am pleased to provide the results of our investigation into allegations made by the Air Line Pilots Association (ALPA) that non-striking Eastern Air Lines (EAL) pilots are not properly performing their safety duties.

The press release to which you made reference yesterday essentially makes two charges: first, that non-striking Eastern pilots have not been properly performing pre-flight inspections on flights from the LaGuardia Airport Shuttle terminal and, second, that these failures have been reported to the Federal Aviation Administration (FAA) and these alleged violations have been observed but not stopped by the FAA.

Early in the strike, union officials contacted the FAA to raise allegations relating to the performance of pre-flight inspections by Eastern Air Lines crewmembers. During one or more of the daily telephone conferences held to exchange strike surveillance information, the union's charges were discussed. Inspectors who were conducting surveillance of EAL's operations were asked to verify the performance of pre-flight procedures. We did not receive any information to validate the union's allegations.

Late last week, the charges of improper or insufficient pre-flight inspection were repeated by the union to a senior FAA official in Washington. A visit to the union "observation post" at the Marriott Hotel near LaGuardia Airport was arranged. On March 17, two FAA inspectors visited the room in which video and photographic surveillance equipment appeared to be in use. The inspectors reported that the observation post permitted a view of EAL's western-most gates and the eastern ramp area. It did not offer a clear, unobstructed view of all the gates. In fact, the northern-most gates were barely visible. During the visit, the EAL shuttle flights were operating from gates 7 and 8 on the northern side of the terminal. From their vantage point in the union observation post, our inspectors were unable to see these operations clearly enough in order to determine unequivocally whether appropriate pre-flight inspection had been conducted.

It is the FAA's position that a detailed pre-flight examination of an aircraft is warranted before a crew's first flight of the day or when a crew change is effected. Prior to a crew's subsequent flights in the same aircraft, the crew may perform a more abbreviated pre-flight inspection to determine whether any damage occurred during operation of the aircraft.

The union press release to which you referred yesterday indicates the union belief that the very detailed pre-flight inspection is required prior to each operation of the aircraft. In discussions with union officials which were held yesterday, the union refined its position to reflect the belief that a detailed pre-flight inspection should be done each time the flight number of the operation has been changed, whether or not a crew change has occurred. This understanding is not reflected in the EAL operations manual, which provides for the abbreviated inspection at intermediate stops, nor is there such a requirement in the Federal Aviation Regulations.

During yesterday's visit, our inspectors were provided copies of video tapes made by the union surveillance equipment. The FAA will promptly review that information, and any other data provided by ALPA, and take appropriate action.

Safety of airline operations is our most important responsibility during this strike. In order to ensure that public confidence in the safety of the Nation's airlines does not wane, effective yesterday afternoon I directed FAA inspectors to conduct safety surveillance on 100 percent of the Eastern flights which operate anywhere in the United States, until further notice. One of the items FAA inspectors will check during this surveillance is the pre-flight inspection. Prompt and fair investigation and appropriate enforcement action will be taken in any instance where proper pre-flight inspections are not conducted, or any other violation of safety regulations appears to have occurred. Investigations of two possible infractions related to pre-flight inspection at LaGuardia Airport are currently underway.

I trust we have satisfactorily responded to your request.

Sincerely,

Signed Robert E. Whittington

Robert E. Whittington
Acting Administrator

**Mr. Molinari.** I have no further questions, Mr. Chairman.

**Mr. Oberstar.** At this point, I would like to yield the chair to the gentleman from California, Mr. Packard.

I think the point that the gentleman from New York raised is appropriate and we would ask Mr. Broderick to respond directly as the officer in charge of the FAA. Clearly should such lapses be occurring, it would be a violation of FAA rules. It would be a violation of law.

**Mr. Belger.** I will talk to Mr. Broderick as soon as I can.

**Mr. Oberstar.** Thank you.

The gentleman from the Virgin Islands?

**Mr. de Lugo.** Thank you very much, Mr. Chairman.

My question relates a bit to the question that was just placed by Mr. Molinari. That is my understanding is that under FAA regulations that prior to the departure of any flight, the ground security coordinator is supposed to brief the airline crew or, in this case, the captain as to the security situation before that flight leaves.

Now in the case of flight 103, Pan Am 103, you had this alert going on for almost a month leading up to flight 103. Were the crews of these various flights that were taking off during that period briefed as to the security situation or were they given a routine assessment of it which, as I understand, in most cases the captain is told as he taxis down the runway that the flight is okay for security and that's it? What is the situation there?

**Mr. Salazar.** If I may, there presently is a requirement for the exchange of information between what we term the ground security coordinator and the inflight security coordinator, the inflight security coordinator almost always being the pilot in command.

That active exchange of information is to occur at our airports where we have extraordinary security. Oftentimes that exchange of information is on a form that is transmitted or sometimes is done verbally.

In response to your specific question, sir, the investigation related to the Pan Am 103 tragedy is still ongoing, and I don't believe that information is available at this time.

**Mr. de Lugo.** Well, all right. We won't talk about flight 103, but could you describe to me the type of an exchange that would take place between the ground security coordinator and the captain if there was an alert? What type of an exchange should take place? Is the FAA—let me put it this way—is the FAA monitoring this situation at the present time?

**Mr. Salazar.** Yes, indeed, sir, there is a process ongoing that would look very closely at that exchange of information.

The regulatory requirement as it presently exists requires the exchange of information for a specific threat.

**Mr. de Lugo.** What form would that take?

**Mr. Salazar.** Our expectation, sir, would be a verbal communication between the ground security coordinator and the inflight security coordinator. That doesn't necessarily mean it has to be done in the cockpit; it could be done in the dispatch area, wherever it's convenient to facilitate that exchange of information.

**Mr. de Lugo.** Well, let me ask you something in another area. Based on security procedures that are being used in airports here in the United States, could a Pan Am 103 incident have occurred here with a flight originating in the United States?

Mr. SALAZAR. I think, sir, until we begin to learn considerably more facts about the perpetrators of that particular crime, I would be in a better postion to provide an answer to that question. It's fairly general in nature, and I would hate to——

Mr. DE LUGO. All right, we'll give you some more time on that.

Mr. SALAZAR. Thank you.

Mr. DE LUGO. Let me ask Ambassador McManaway—you stated that if there was a high threat or a very serious threat to a flight that you could recommend that the flight be cancelled. You said that there had never been a flight cancelled.

Has there ever been a recommendation made that a flight be cancelled?

Ambassador MCMANAWAY. Not under these circumstances, no, sir.

Mr. DE LUGO. Not under those circumstances. If there was a recommendation made, is that just a recommendation or does that flight have to be cancelled by the airline? Does the airline have any discretion there?

Ambassador MCMANAWAY. We don't have authority to order it under law to be cancelled. I would be astonished if a U.S. air carrier refused.

Mr. DE LUGO. Well, perhaps Part 121 of the Federal Air Regulations, restriction or suspension of operation, "Domestic and flag air carriers." It reads, "When a domestic or flag air carrier knows of conditions, including airport and runway conditions, that are a hazard to safe operations, it shall restrict or suspend operations until those conditions are corrected."

I am advised that that could suspend the flight.

Mr. BELGER. I think it might be appropriate if I could answer that question.

Mr. DE LUGO. Surely.

Mr. BELGER. In fact, we know that in the past, in the course of discussions with the airlines about specific types of security information, they have in fact cancelled flights based upon information that we have shared with them.

We also know, sometimes on a too-frequent basis, that flights are diverted or delayed in order to respond appropriately to bomb threats.

If the situation arises that the threat information is such that we cannot direct countermeasures to ensure that that flight can be conducted safely, I can assure you that we will cancel the flight. I have no reservations——

Mr. DE LUGO. Well, that's what I wanted to hear.

Mr. MINETA. Would the gentleman yield?

Mr. DE LUGO. I yield to the gentleman from California.

Mr. MINETA. I'm a little confused here. First of all, Mr. Salazar said that you don't deal in general information, that you only deal with specifics in trying to inform the flight crew, the inflight supervisor. You don't inform them unless you have a specific one, not just a general one.

Mr. BELGER. That's basically correct. Yes, sir.

Mr. MINETA. And then you just said, "We would recommend that flights be cancelled." Yet earlier you had said, "We have never recommended that a flight be cancelled." I'm a little confused here and I would like to get some clarification.

Mr. BELGER. If I could, the point at which we or the airlines would consider the cancellation of a flight, I think we would be talking about a specific threat against a specific flight or flights that is credible, that we have assessed to the point that there seems to be the intent to do whatever the threat says. If we're talking about a threat against a specific flight at a specific time that meets that other criteria, and if we can't have the assurance that effective countermeasures could be implemented, we would have no reservation in using our authority to cancel that operation.

Mr. MINETA. But in the case of Pan Am Flight 103, it came in from another carrier, and that's not a specific threat against Pan Am Flight 103. Yet there was a threat floating around out there.

Now, if I am the Captain of the flight, somebody had better damned well tell me that there is going to be a problem in the general area. If I'm flying out of Frankfurt, then it seems to me that I have to know that flights out of Frankfurt to the United States may be under some risk.

Now, I don't understand why this vacillation occurs. We passed this act in 1985; that was a time when we had a breakfast meeting with Mr. Fascell and we went over this whole thing with the Chairman of the Foreign Affairs Committee, with people from the FAA at the time, and now you're saying, "Well, we haven't worked out all the details yet." That really blows my mind, because——

Mr. BELGER. No, sir, I certainly don't want to leave any impression that we haven't worked out the details. If I wasn't clear I will try again.

Our expectation is that if the information that would affect that specific flight—if that exists, it should be provided to the inflight security coordinator. There are no ifs, ands, or buts about that for a specific flight. It is not our expectation at this point that information be provided to the inflight coordinator if it is not specific to that flight.

Mr. MINETA. And yet you say that you have never recommended cancellation of a flight?

Mr. BELGER. No, sir, I think we've answered——

Ambassador MCMANAWAY. I think part of this may be my orientation, which is international. I am thinking about the process in which we participate, which is not domestic at all. We would not be aware of many things that the FAA would be doing with domestic flights.

I may have added to the confusion there, and I apologize if I did.

Mr. MINETA. I thank the gentleman for yielding the time.

Thank you.

Mr. OBERSTAR. Well, the gentleman's time has expired.

Mr. DE LUGO. I was afraid of that. [Laughter.]

Mr. OBERSTAR. The Ambassador's response was to a question that the Chair posed earlier about his statement referring to "specific and credible threats to civil aviation security which cannot be countered." It involved a different set of questions, but the answer raises the problem here of interagency coordination. The State Department might not be aware of domestic threats. The FAA might not be made sufficiently aware of threats at other airports overseas.

I think this is a matter that I hope other members of the committee would pursue further.

The Chair will now recognize the gentleman from Pennsylvania.

Mr. KOLTER. Thank you, Mr. Chairman.

In view of the fact that I arrived late, I would like permission to submit my opening remarks for the record, please.

Mr. OBERSTAR. Without objection, so ordered.

Mr. KOLTER. Thank you, sir.

[Mr. Kolter's prepared statement follows:]

### STATEMENT OF HON. JOE KOLTER, A REPRESENTATIVE IN CONGRESS FROM PENNSYLVANIA

Mr. Chairman, I commend you for calling this subcommittee together to investigate the issue of aviation safety.

I feel deep regret, however, for the recent tragedy that makes our meeting today all the more necessary. My heart goes out to the family, friends and coworkers of the Flight 103 disaster victims.

We live in a world today where one cannot guarantee the safety of one's self or others even though no offensive act has been committed which may encourage retribution. There are certain areas of our world where some men do not hold human life in the highest regard as do we. It is unfortunate that rigid measures must be taken to better ensure that savage acts of terrorism such as the December calamity over Scotland do not recur.

The United States Secretary of Transportation has the power, by act of Congress in the Foreign Airport Security Act of 1985, to take certain actions deemed necessary to alleviate the threat of terrorism to flights involving domestic or other air carriers which originate in foreign countries. The Transportation Secretary has within his power sanctions which include the authority to immediately suspend service with foreign airports which do not comply with the stated conditions of the act. Grounds for suspension are reached when "a condition exists that threatens the safety or security of passengers, aircraft or crew traveling to or from a foreign airport . . ."

It is my strong belief that we as members of Congress must do whatever we can to end this everpresent threat of terrorist attacks to airlines involving American passengers, crew or planes. I feel that current law should be vigorously enforced and preventive actions be taken by our government to repel future threats to life, safety and security.

I call on colleagues to join with me in urging the Secretary of Transportation to use his power to strictly enforce the provisions of the Airport Security Act and if need be, to support additional appropriations to expand and strengthen security programs.

Mr. KOLTER. Mr. Belger, under interrogation from Mr. Molinari you stated that if in fact there was a question of international security overseas, at a certain point in time the FAA would move in. Do you recall that?

Mr. BELGER. I recall——

Mr. KOLTER. If there was a question, then you would move in.

At what point would you move? Would that happen after an accident, or would you have intelligence reports to indicate that some action should be taken?

Mr. BELGER. We routinely conduct foreign airport assessments, and also routinely inspect the procedures of U.S. airlines throughout the world.

If in the course of our foreign airport assessment program we see conditions which do not meet the international standards against which we inspect, we have a very well-defined process that is laid out in the 1985 legislation which we would follow to work with that country, first of all, to correct those deficiencies we would find. If that is not possible, there is again a very well-defined procedure in the legislation through which the Secretary of Transportation and the Secretary of State would arrive at a point where public advisories are made that would tell the American public that it is not in fact safe to travel to this particular airport. As I said before, that has occurred once.

So it is not just a case of waiting for something to happen and then reacting. We do aggressively and intensively inspect the operations of U.S. air carriers and conduct the foreign airport assessments.

Mr. **Kolter.** Could there possibly be a scenario where the Department of State would have one thought on the matter, and the FAA have a different thought? And if so, who would prevail?

Mr. **Belger.** Well, it would be hard for me to imagine that that would happen. I am quite confident in my own mind that the Secretary of Transportation and the Secretary of State would not be of different opinions when we are talking about the existence of an unsafe condition.

Mr. **Kolter.** Thank you.

Mr. **Oberstar.** The gentleman from California, Mr. Packard.

Mr. **Packard.** Mr. Chairman, thank you.

I would appreciate it, Mr. Belger, if you would review for me what procedures are required of the airlines and the airports in the searching or the processing of luggage, either carry-on—I think most of us know what you do with carry-on, but I'd like you to be specific in terms of what the instructions are in terms of looking at cameras, looking at electronic devices, any prohibitions, and then particularly I would like to know the process that airports and airlines are required to go through in terms of checked-in luggage.

I would also like to know what you do with mail.

Mr. **Belger.** Again, I must ask Mr. Salazar to help me with some of the specifics here.

In general, the security procedures for the processing of checked baggage are tailored to certain types of airports. We have requirements for domestic operations, we have requirements for international flights departing the United States, we have requirements for certain locations overseas which we think might be high-risk. We have requirements which we spoke to on December 29th at those 73 airports in Europe and the Middle East.

So to answer your question very thoroughly, we would have to talk about each one of those levels of security.

If we are talking about the 73 airports in Europe and the Middle East for which we prescribed additional security procedures on December 29th, maybe I could ask Mr. Salazar to go over the specifics of that to the extent we can.

Mr. **Salazar.** I'm a little hesitant to talk publicly about a lot of the details. In general——

Mr. **Packard.** We can ask that question later on.

Mr. **Salazar.** I would appreciate it if we could do that, yes, sir.

Mr. **Packard.** Let me ask, have those procedures changed since Flight 103?

Mr. **Belger**. Oh, very definitely. On the 29th of December the FAA Administrator announced that we were imposing some rather strict procedures that focused on checked baggage and small parcels.

Mr. **Packard**. Let me also ask you a question that perhaps would not violate security.

What kind of monitoring or inspection do you have of the procedures that are now in place and that were in place before?

Mr. **Belger**. Well, as I said in response to a previous question, we frequently inspect the operations of U.S. air carriers. Since December 29th we have conducted assessments at the great majority of those airports to specifically monitor the implementation of those new requirements that were imposed on the 29th of December.

Mr. **Packard**. What does FAA do in terms of researching new technologies in companies that are working on detection devices? Do you aggressively pursue those? Do you visit companies? What do you do in terms of looking for and pursuing new technology?

Mr. **Belger**. We have a variety of ways to do that, sir, in trying to bring out the best technology possible through solicitations, through academia, to get some of the finest minds in the country and in the world to look at some of these very, very complex problems. We have unsolicited proposals that come to us that we look at and evaluate. We have a very active R&D center in our FAA Technical Center in New Jersey. And we have bilateral and multilateral discussions with the international community to see where they are advancing in civil aviation security, to see if there are other ideas that we can also explore, as well as to invest the best dollars.

Mr. **Packard**. Mr. Ambassador, let me ask you in relation to some of your testimony. You indicate in your testimony that there was no connection between the Helsinki threats and Pan Am 103?

Ambassador **McManaway**. That's correct, sir.

Mr. **Packard**. Were there threats that were specific to Pan Am 103?

Ambassador **McManaway**. No, sir, there were not.

Mr. **Packard**. None at all?

Ambassador **McManaway**. The anonymous call, which we determined to be baseless, was a hoax.

Mr. **Packard**. Were there any threats of a general nature that could apply to 103, separate and apart from the Helsinki threats?

Ambassador **McManaway**. There was the existence of the bomb, found by the West German authorities, which, because it had a barometric triggering device, would be a bomb that would be applicable for use against an aircraft. In that sense, there was a general threat. But there was no association of that bomb to any airline or flight. In fact, when the arrest originally took place, the West German authorities were working on the assumption that the threat was a different type of threat entirely against a different airline. In fact, they thought they were after a group of terrorists who were going to follow the technique or method used by the North Koreans in blowing up KLA-58; that is, leaving the bomb on board the aircraft and getting off.

Mr. **Packard**. This may be a question which you may prefer not to answer, or to answer under a different situation.

There are, in the last 24 hours, claims that PanAm and, I presume, Government agencies, were negligent in terms of heeding threats. Do you have any response to that?

Ambassador **McManaway**. I don't believe it's true, sir. One of the most helpful things in this hearing today was the testimony of the two Members of Congress who reminded us all that in spite of the warnings, the threats, the hoax, what have you, this device was very difficult to detect. Pan American had increased security measures against both the hoax, which we left standing as an alert, and the bomb.

Mr. **Packard**. My last question, Mr. Chairman.

Then to your satisfaction did Pan Am follow all of the rules, regulations, and procedures that were expected of them under the existing threat?

Ambassador **McManaway**. I don't believe I'm the right person to answer that question, and I suspect my colleague would prefer to answer it in executive session.

Mr. **Packard**. Thank you.

You would prefer to answer that otherwise?

Mr. **Belger**. I would prefer to deal with that question in executive session.

Mr. **Packard**. Thank you.

Mr. **Oberstar**. Thank you very much, Mr. Packard.

The gentleman from Texas, Mr. Laughlin?

Mr. **Laughlin**. Thank you, Mr. Chairman.

Mr. Ambassador, earlier today we heard testimony that El Al Airlines, which has been subjected to terroristic threats for many years, has a two-hour requirement for passengers and people delivering packages to arrive at the airlines before that departure.

I would like to know if we have any procedures when we have a general threat, as existed in the Frankfurt area, where we require U.S. carriers or other carriers landing in the United States to have a two-hour requirement for passengers so that their luggage or packages could be searched while that passenger or the person delivering the package was present? And if we don't, do you think it would be a good procedure under those types of circumstances where we would require the person delivering a passenger or goods to be carried on an airlines to be present while it was searched?

Ambassador **McManaway**. I'm not the expert on this, Congressman, but I would certainly have no objection myself. I would say that I just happened to be talking to a member of my office who just came in a few days ago from London on PanAm, and he said that the new procedures are quite onerous, it took him quite a while longer to get through the airport, but he didn't hear anybody complaining about it.

Mr. **Laughlin**. Maybe someone else on the panel is in a better position to answer whether we have those procedures in place.

Ambassador **McManaway**. I would make just one point, if I could. I think that in fairness to the U.S. carriers, El Al does have a very excellent record and they have very rigorous standards, but they have only about 20 aircraft that they are managing. So they have a much more manageable problem than our air carriers have.

Mr. **Oberstar**. Furthermore to that point, Mr. Ambassador, it should be pointed out that El Al is a national carrier and is not required to make a profit.

Mr. **Laughlin**. It seems to me, as a member of the traveling public, that we would not object to the FAA or the airlines requiring a two-hour appearance for our luggage to be checked when these threats are floating around in the area.

Ambassador **McManaway**. I wouldn't object at any time.

Mr. **Laughlin**. That's all I have, Mr. Chairman.

Mr. **Oberstar**. The gentleman from Virginia, Mr. Payne?

Mr. **Payne**. Thank you, Mr. Chairman.

I would like to follow up on the point that the Chairman just made, or the question, perhaps, having to do with the relationship between the State Department and the FAA and the process related to the matter of determining a specific and credible threat, and then the recommendation or requiring of cancellation and public travel advisories.

Mr. Ambassador, could you comment specifically on how that works, and what the responsibilities of the State Department and the FAA are in that process?

Ambassador **McManaway**. I could do a much better job in executive session, Congressman.

Mr. **Payne**. That's the only question I have. Thank you.

Mr. **Oberstar**. Mr. Ambassador, Mr. Belger, the United States has for several years had the Sky Marshals program in operation. I believe they've traveled something like four million miles in the last year, 1988.

What has been the effectiveness—what deterrent effect is there with Sky Marshals? Have there been any arrests on board aircraft? Could you elaborate on those points?

Mr. **Salazar**. If I may, Mr. Chairman?

Mr. **Oberstar**. Please.

Mr. **Salazar**. I'd like to respond to the very effective use of Federal Air Marshals which we continue to use as a countermeasure.

There have not been any arrests made, but that isn't to say that their presence or the mere fact that they are flying has not deterred the possibility of these things occurring.

The FAA did something fairly unique that it did not do originally when we flew Federal Air Marshals. Rather than hiring strictly Federal Air Marshals, or those people that we would consider just to be "gun-toters," we hired FAA Special Agents. These people are the same people we rely on consistently to do all of the regulatory enforcement inspections to ensure a safe civil aviation security environment, whether that is here in the United States or overseas.

Our regulatory inspections could also require the safe transportation of hazardous materials and a variety of other types of duties, and only on a part-time basis do we then deploy them as effective countermeasures in flight.

Mr. **Oberstar**. I want to ask this question about the FAA and the Department since we have you and your associates here, Mr. Ambassador.

In the wake of PanAm 103 and in the wake of the ICAO conference in Canada, increased security standards have been promulgated and increased requirements placed upon U.S. carriers. The U.S.

carriers feel that the same standards have not been applied to foreign carriers, and that, first of all, this is creating a security gap; and that secondly, it is creating a competitive gap between U.S. and foreign carriers.

I would like you to respond to the steps that are being taken to equalize the burdens of these security provisions and to equalize the security measures provided by both U.S. and foreign carriers.

Mr. **Belger**. We want to see an improvement, a strengthening of security procedures throughout the world. That was our clear objective when we went to Montreal for the ICAO conference. I believe that the resolution which was unanimously passed in Montreal will result in some improved worldwide security standards.

It is an appropriate avenue to follow to, on a multinational basis, achieve worldwide improvements. In addition to that, as I said earlier, just last week, after a very thorough review, Secretary Skinner did announce the implementation of a new requirement placed upon foreign air carriers that would require them to provide to us their security programs for our review. I think that will give us the ability to ensure that those procedures used by foreign airlines are adequate to meet the threat that exists in any particular location.

Mr. **Oberstar**. But they are not the same requirements imposed on U.S. carriers?

Mr. **Belger**. Not necessarily. That is correct.

Mr. **Oberstar**. Why not?

Mr. **Belger**. The general basis upon which we would review the foreign air carrier programs would be the internationally-accepted ICAO standards.

Mr. **Oberstar**. But if different standards and perhaps a higher level of security or delay of other requirements, costs of providing security detection devices, are going to be imposed on U.S. carriers, then there is going to be a competitive gap as well as a security gap.

Mr. **Belger**. Economics is obviously a factor. We must assure that U.S. air carriers have the highest standards that we can humanly and technologically envision.

As I said before, we want to see international standards raised. We are working aggressively through the international community to do that. I am optimistic that we will see results.

We will also use our regulatory authority under Part 129 to review those programs very thoroughly, and we will continue that avenue.

Mr. **Oberstar**. I think there is a great willingness on the part of the FAA and the Department of Transportation to get as tough on foreign carriers as you are getting on American carriers.

But let me ask Ambassador McManaway, being very blunt about it, certain high level sources have told me that they have been told by foreign government representatives that if we get as tough on foreign carriers as we are getting on American carriers, that they won't tolerate it; that's an intrusion upon sovereignty, and that they will take countermeasures against U.S. carriers that will have economic consequences for them operating abroad.

You are the voice of the State Department today.

**Ambassador McManaway.** I had not heard that, Mr. Chairman. I am not too surprised to hear it. I, for one, would be quite prepared to go at them regardless.

I think one thing we might mention here is that one reason that we and the United Kingdom called for the special session of the ICAO at the ministerial level—to which Secretary Skinner led our delegation—was just this problem of trying to get standards raised worldwide. Now, at that meeting the Council charged its special committee to go out and look at raising standards in a number of specific areas, and I will just mention a few: detection of sabotage devices and special explosives; comprehensive screening of checked baggage; screening of passengers and hand baggage; security problem created by increasing carriage of radios, computers, and other electrical equipment; and so on. It's a fairly long list.

We don't have the results of the work of that committee of the Council. I would submit that we should see what they come back with and see what the other countries do adopt for their carriers.

To be honest, there was discussion during this Council meeting by the less developed countries of the cost, and they did give us some static about the developed countries, imposing—or trying to impose—on them standards that they couldn't afford, and that we should pay for it. So that may come back to haunt us later on.

But let's see what comes of this work plan of the Council of ICAO and see where it leaves us, and go from there.

**Mr. Oberstar.** I appreciate your response, and I can certainly understand the concerns of lesser developed countries for the costs. But if they can't meet standards, maybe we need an Athens-type advisory. Lives are at stake, and it is going to be that one Achilles heel, that one gap in the security blanket that is going to result in loss of lives. That's always the way it is. We are always looking at the last war as we fight the next one, looking at the last security tragedy as we prepare for the next one, and looking for systemic solutions to the problem.

I appreciate your statement. Knowing you, I know that you sit down and negotiate tough with our counterparts.

Last year, Americans made 41 million trips abroad; foreign visitors made about 33.7 millions trips to the United States. Last year we had, for the first time in aviation travel, a deficit balance of payments. That is, Americans spent more traveling abroad than foreigners spent in the United States, to the tune of about $5.7 billion. There is a net gain in foreign countries from Americans traveling overseas. They travel and they spend a great deal. There is a tremendous benefit for other countries economically that they ought to be prepared to protect with appropriate security devices at airports. If they are not prepared to do that, then we ought not allow our fellow citizens unnecessarily to expose themselves to risk.

Now, I define safety as "a relative absence of risk." I think that the departments need to get that message as they sit down to negotiate with our trading partners and with our aviation trading community in the world at large.

I have no tolerance for the financial argument that it is too costly for us. Our fellow citizens are spending an awful lot in other economies as they travel abroad, and if those countries don't recognize that they've got to provide security to make it attractive for our fellow citizens to travel in their countries and spend money there, to enrich their economies to the extent that they do so, then they need a lesson in economics, at least, if not in security.

Ambassador **McManaway**. You'll get no argument from me, Mr. Chairman, but I would point out that in—let's take both London and Frankfurt airports. They passed FAA assessments in 1988. It would be wrong, I think, and unfair in a blanket way to suggest that all foreign airports and carriers are less security-minded than we are. There are some that are, and there are some that can't afford these various measures we would like to see put in. But it's not all of them, and unfortunately, it's not the ones that we have focused on here today.

Mr. **Oberstar**. Well, the State Department does have a very extensive and commendable program for security training on an exchange basis in providing assistance to countries that don't have their own resources, and some that do.

Ambassador **McManaway**. Yes, sir.

Mr. **Oberstar**. And the State Department has provided training in the last year to several hundred foreign nationals to take the appropriate preventive security measures.

Ambassador **McManaway**. Yes, sir, and we can also provide a certain amount of equipment through that program, and we do.

Mr. **Oberstar**. Yes. You have heard enough testimony today from our colleagues, and questions, showing the genuine concern in the Congress for adequate security measures to be taken in other countries.

Among the items identified in the foreign inspection program are problems in identification of persons, the security training programs of foreign countries, perimeter fencing which I've already mentioned, adequacy of locked doors once you get into the security perimeter, law enforcement presence, and the secure operations areas.

What actions are being taken by foreign governments in response to these points that our foreign inspection program has raised with those 107 airports?

Mr. **Salazar**. If I may respond, sir, in those instances where we would find those conditions to exist there would be some form of recommendation made as to what might correct that particular deficiency. If it is one of training, the FAA works hand-in-glove with the State Department's Antiterrorism Assistance Program and has provided its facility in Oklahoma City as a training mechanism for a variety of foreign students to get the latest in civil aviation techniques.

If it is a matter of law enforcement presence, or access and perimeter controls, and we have concern that an aircraft on the ground may be at some risk, we would ask for the increase of law enforcement and security presence until perimeter protection could be strengthened.

If these recommendations were not heeded, then in fact the legislation in the law provides for sanctions to then be applied, including ultimately—as was pointed out earlier—advice to the public about this particular airport not meeting international standards.

Mr. **Oberstar**. In the Air India incident in 1985 over the North Atlantic, in the 1986 TWA incident out of Athens, and in the 1987

Korean Airlines incident over Thailand, a total of 448 lives were lost. Were any Americans among those?

Ambassador **McManaway**. Not in the Korean Airlines incident. There were on both the others. There were no Americans on the Korean flight, but on the Air India and on the Athens flight.

Mr. **Oberstar**. I think the recent incident has tended to overshadow the fact that through 1985, there were an average of 25 to 38 skyjackings per year. Increased awareness and action on security has cut that number roughly in half, from 13 to 15, in 1986 and 1987. In 1988 there were 15 skyjackings.

The point I am making is that Americans traveling abroad, 40 million trips, continue to be exposed to risk. We need to intensify these efforts that are already underway which we have been discussing this morning. There will be some aspects of that issue that I will pursue further in executive session.

I understand that at JFK Airport, Mr. Belger and Mr. Salazar, there are roughly 47,000 people who have access to the airport beyond the passenger emplanement area. What security steps are taken to assure that a mechanic, or a supposed mechanic, doesn't walk on board, into the tarmac area, with what appears to be a tool chest but what in fact may be laden with an explosive? Or that a cleaning person or a cleaning van or a food service person may not be doing the same thing?

Mr. **Belger**. Mr. Salazar has been intimately involved in the formulation of a relatively recent FAA regulation that places requirements on airport operators to ensure that only authorized individuals have access to certain secure areas.

Mr. **Salazar**. In addition to that, before I go into the description of the regulation requiring automated access, it's just that condition, Mr. Chairman, that prompted the FAA to look entirely at the access at airports. These are huge communities where, as you pointed out, 47,000 people must come and go every day.

It seems to us, and it seemed to the FAA and to the industry, that this was beyond the human capability of an individual who has a ledger who can identify each individual who is authorized in an operations area. Consequently, the FAA has moved to now require that there be an automated access system installed, a computer-enhanced system to more rapidly screen people and to be able to more effectively take people out of the system that no longer have a right to be in those restricted areas.

Additionally, there is currently a requirement that those people who require unrestricted and unescorted access to restricted area to airports hired after a specific date contained in the regulation must have background investigations completed, as well.

Mr. **Oberstar**. There are allegations that there is no requirement that the systems be uniform from airport to airport. Recognizing that there are differences—JFK is not Fort Wayne or Duluth, Minnesota. There is a vast difference in numbers and configurations of airports, but certainly there ought to be some standardization from airport to airport.

Mr. **Salazar**. We have taken that into account, sir, when we address the category of airport. In other words, airports of similar size ought to have similar types of systems. But I think your issue is more about the compatibility of a particular system. We are very mindful that compatibility would be an excellent accomodation but it does not necessarily, over a national basis, buy us increased security. It is certainly more convenient for people to have an access card that would allow them access through Chicago as it would through JFK, but the fact of the matter is that that should be an individual airport operator's responsibility to establish those controls in concert and in conjunction with the air carriers that serve that airport.

Mr. **Oberstar**. Next month, the passenger and checked baggage reconciliation systems will be strengthened to take into account pre-existing gaps in the system. That refers to interlining.

One of the questions raised by private security providers and airport operators and the airlines is adequacy of baggage check on passengers moving from one line to another and from one unsecured airport to a sterile area in a secured airport. Are you at liberty to describe for us the steps that are being taken?

Mr. **Salazar**. I believe so. The second phase of the international requirements, sir—and its origin is basically an international requirement that we also require U.S. air carriers that are operating internationally to adhere to, and foreign air carriers operating within the United States as well—is that there must be a full, positive passenger reconciliation. In other words, when a passenger goes on board, there must be a system that identifies that the bag is on board with that passenger.

Now, the international requirement provides that each member state could implement this full reconciliation, or subject that bag to some other type of security control. We have defined in this country what that security control is.

Specifically to your point, in April a second phase now comes in to being for checked baggage. Whereas before the airlines must have looked at what we consider online passengers—in other words, the same carrier transferring baggage to the same carrier—the second phase now must take into account interlining baggage, that is, a different carrier to a different carrier, and how they match that baggage to that passenger. And more importantly, and probably the most difficult of all, how a carrier now must be able to account for any passenger that disembarks at an intermediate point, how they can account for that individual and then be able to identify baggage and deal with it under security control.

Mr. **Oberstar**. Is technology presently available to do this, to do the positive match of baggage to passenger, and determine whether a passenger may have left a flight at an intermediate point and his baggage remained on board?

Mr. **Salazar**. I believe technology has been developed and explored through the efforts of the International Air Transportation Association. In particular, I believe they are fairly successful in developing administrative or computer systems that provide a carrier with reasonable assurance of those kinds of security methods.

Where it becomes fairly difficult is where each airline is applying the very same standard in the very same way, so that on interlines the receiving airline has some assurance that some security control was applied to that baggage. So in fact the ideal situation would be a fully-automated system, and I am sure the carriers in the subsequent panel could describe to you in detail what their advances are in that area.

Mr. **OBERSTAR**. Now, that matter of baggage and passengers being together on the same flight, where you have a dedicated terrorist who is willing to sacrifice his or her own life, that may diminish in significance. But in most cases the terrorists are as cowardly as they are destructive, and are willing to go to some lengths to leave a bag on board.

In the most recent case, is there evidence that a bag was not associated with a passenger on board?

Mr. **SALAZAR**. We're not at liberty, sir, to discuss the details of the ongoing investigation.

However, the requirement for full, positive passenger reconciliation does in fact have some security benefits. But we view that the greatest benefit is used in redundant systems. It is this system and other security systems, so that you build as many barriers as possible so that it will prevent just exactly what you described, an individual who can go on board, leave a device, and then merely walk away and not suffer the consequences.

Mr. **OBERSTAR**. You said the word that I was looking for, the redundancy. Just as Federal Aviation Agency regulations build redundancy into aircraft construction and into maintenance programs to provide cushions of safety or margins of safety, as I have called them in the past, so in security there must be margins of safety and redundancy and backup systems, and doing all that we can to prevent or deter the obvious. If we can at least do that and do it effectively and credibly, then we will have taken a very large and important and effective step in the right direction.

Does the gentleman from Georgia, Mr. Lewis, have some questions?

Mr. **LEWIS**. I have no questions, Mr. Chairman.

Mr. **OBERSTAR**. Does the Foreign Airport Security Act that was reported out of this committee and that was enacted into law two years ago require strengthening in any respects that you can think of at this point?

Put otherwise, Mr. Ambassador and Mr. Belger, do you believe that from the standpoint of your respective departments you have all the authority in law that you need to take the actions necessary, both domestically and in international trade, to assure security?

Mr. **BELGER**. From our perspective, I think that the legislation as it currently exists is adequate. It gives us the authority and flexibility to work in a cooperative way with those governments to find a solution to improve security at those airports. It has been very effective.

Ambassador **McMANAWAY**. I would agree with that, Mr. Chairman.

Mr. **OBERSTAR**. Then it comes down to a matter of research and development to produce those detection devices of ever-increasing sophistication to detect explosives. Perhaps it's possible that with technology in place at the time of Pan Am 103, that device—whatever it was—might not have been detected by then-available technology and maybe something new would have been more effective. Maybe it would have been detected by available technology.

But beyond that, beyond the research and development, an area where I have criticized the FAA in the past for not devoting sufficient resources, and I have made very strong appeals to my colleagues in the Congress to appropriate the necessary research and development funds, is the training of people who are providing security at airports. We know that those who attend the magnetometers are, for the most part, minimum wage people with minimum training, that the FAA does not have extensive Federal Air Regulations governing detailed training of such personnel.

We know that that's a boring job. It is also a boring job looking for cracks alongside rivets on the hull of an aircraft. It is a boring job looking for corrosion and weakening of structural members during inspection of aircraft, but it's one that has to be done. It is one that is done very effectively when you have exceptionally well-trained personnel. So the training of people is the essential, indispensible ingredient. Your machines aren't going to do this for us; people are going to do it. People are going to provide security. Training our own first, and those of other countries next, making sure that other countries do all that they can, is ultimately the guarantor of security.

Mr. Ambassador?

Ambassador McManaway. May I respond, Mr. Chairman?

I agree with everything you have said, but I would be remiss if I didn't make a pitch for the program you have already very helpfully mentioned—our program in which we have trained 7,200 people since the beginning of the program from 39 different countries.

But I would like to point out that what we're talking about here are pro-active-type measures. Our Government has a very proactive counterterrorism program and policy. It involves not just the "no concessions" policy, with which we are all familiar, but we spend a lot of time and a lot of effort going after states that support terrorism. We don't believe that terrorist organizations can pull off a Pan Am 103 without state support from somewhere. We go after them. We are looking for ways—constantly working with our allies and working unilaterally—to make them pay, to make it too costly for them to continue to support terrorist groups.

We also have a very active program that gets into law enforcement. It really is the bread and butter of our activities, and that is identifying terrorists, tracking them, getting them apprehended, getting them prosecuted, and getting them punished. You may have read last week where we captured Fawaz Younis, brought him to this country, and prosecuted him, found him guilty and sentenced him.

That's a very big part of it, as well. We have to do all the things we've been talking about here, but we also have to make the terrorists pay.

Mr. Oberstar. I appreciate that comment very much.

Mr. Belger, do you have something further to add to that?

Mr. Belger. Mr. Chairman, I could not agree with you more. Any safety system must rely upon procedures, equipment, and people. In many systems, it is the human element that is the weakest link that sometimes needs the most attention.

We also have a very aggressive technical assistance and training program in the FAA. We are putting a great deal of emphasis on providing to the airlines for use by their passenger screening people some updated and hopefully helpful training materials to make them better able to detect these types of very sophisticated devices that we are concerned about today.

We cannot ignore the human factor implications of the people who do this kind of work. I am aware that the airlines have an initiative to look at the human element in this system, and that might be something you would want to ask of them later. They are clearly an integral part of the system.

Mr. OBERSTAR. There's no question about it. We certainly appreciate that.

The gentleman from California, Mr. Packard?

Mr. PACKARD. Thank you, Mr. Chairman.

We prevent the distribution, production, and manufacture of certain drugs until they have been adequately tested. We pass rules and regulations that prevent plastic guns from being produced without certain detectable parts to them for surveillance.

Is it possible for us to prevent or to ban the manufacture and production and distribution of explosives until there are detection devices that would allow them to be detectable?

Mr. SALAZAR. If I may, sir, I believe that there are always legislative remedies to these kinds of things, but I think certainly that the FAA in particular would still have to be on guard and still advance this technology and still look for the best methods of finding these kinds of explosives or articles even though they are banned, because there will always be other countries that may not abide, and there may be unscrupulous manufacturers, as well.

Mr. PACKARD. Thank you.

[The prepared statements of Mr. Belger and Ambassador McManaway follow:]

# STATEMENT OF MONTE BELGER, ASSOCIATE ADMINISTRATOR FOR AVIATION STANDARDS, FEDERAL AVIATION ADMINISTRATION, BEFORE THE HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION, SUBCOMMITTEE ON AVIATION, CONCERNING AVIATION SECURITY. MARCH 21, 1989.

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before the Subcommittee today to describe briefly for you the FAA's efforts to combat the threat of terrorist activity against civil aviation, and to highlight some of our activities under the International Security and Development Cooperation Act of 1985. With me today is Mr. Raymond Salazar, FAA's Director of Civil Aviation Security.

I am attaching to my prepared statement information that the Subcommittee has requested concerning a variety of areas associated with the FAA's aviation security programs. We would, of course, be pleased to discuss those issues further with you.

I welcome the Subcommittee's hearing today as an example of the commitment of all segments of government to come to grips with the threat of terrorism. The recent tragedy of Pan Am Flight 103 highlights the seriousness of that threat, and reinforces that we must do all that is technologically and humanly possible to reduce that threat to the traveling public. We must demonstrate a firm and unwavering resolve to counter whatever new measures might be instituted by the criminals who would hold our air transportation system hostage and threaten the lives of our citizens.

To respond to the threat of terrorism, it is the FAA's job to work closely with intelligence agencies to seek to identify what the potential threats against civil aviation are, and then to apply the appropriate tools and techniques necessary to offset the tools and techniques used by those who would thwart the system. It is an ever changing process because, as technology and political objectives change, so does the threat.

In the early 1970's, for example, we revolutionized the civil aviation security system by instituting a sky marshal program and by implementing a highly effective passenger screening system designed to stem the wave of hijackings being experienced at that time. But as the level and nature of the threat to the traveling public has varied, so has our response. We have continued to make changes to that system, through heightened expectations of what the system must be able to detect and through improvements to equipment, techniques, and personnel; our recent requirement calling for improved systems for restricting and monitoring access to secured areas on airports is one example of such a change. And the system has worked remarkably well for over a decade and a half.

In 1985, following the TWA hijacking, Congress, with the strong leadership of this Subcommittee, called on the FAA to initiate a major program to make assessments of the security of foreign airports serving the United States. This new legislative thrust, contained in the International Security and Development Cooperation Act, significantly expanded the FAA's "global" presence in security matters and represented a measured response to a growing international threat against American aviation interests. Additional steps were taken as well at that time to increase funding for FAA security research and development work and to bolster security inspector and Federal Air Marshal staffing within the FAA. Further, the United States worked within the International Civil Aviation Organization to strengthen international security requirements, and the FAA took actions to enhance security requirements for U.S. carriers operating abroad.

More recently, following the Pan Am tragedy over Scotland, FAA instituted a series of new security measures to tighten U.S. air carrier security requirements at airports in Western Europe and the Middle East:

o Airlines must now complete 100% x-ray or physical inspection of all checked baggage.

o Passengers may not have access to the contents of checked baggage following the security inspection.

o Airlines must perform a positive match of passenger and baggage to ensure that unaccompanied bags are not loaded onto the aircraft.

o Airlines must take additional measures to preclude unauthorized access to baggage from check-in to loading on board the aircraft.

o An increased number of passengers is to be randomly selected for enhanced screening. Checked baggage of the persons identified for enhanced screening must be physically inspected.

o Small packages and parcels that are shipped through passenger ticket counters must be x-rayed or physically examined prior to shipment.

These measures exact a cost on our air transportation system and are not lightly taken by the FAA. But we will not hesitate to tilt the balance toward improved security and away from convenience when that is necessary to protect our citizens. Thus far, these measures appear to be working without undue hardship or inconvenience to air travelers.

We are also continuing our aggressive program of foreign airport assessments called for in the International Security and

Development Cooperation Act. Since the inception of this program in 1986, we have conducted roughly 800 visits to 216 foreign airports in 107 countries. We have been well pleased at the cooperative approach shown generally by host governments, and believe this program has aided in attaining additional security improvements at many foreign airports. The current Act enables us to conduct assessments, provides general guidance concerning the nature of assessments to be conducted, and prescribes a workable and appropriate approach toward public notification of uncorrected problems at foreign airports, all in a manner which highlights the need for a cooperative rather than unilateral approach toward solving security problems.

We are aware that some have raised the potential need for additional legislative authority in the security area. At this juncture, we have not identified a need for any new legislation dealing with aviation security matters. FAA has substantial existing authority to tailor its requirements to meet new or changed threats, and we would not favor legislation directing specific kinds of security procedures to be followed or which would otherwise reduce our flexibility to deal with a dynamic issue. Should we determine that additional authority is necessary, we will, of course, seek the assistance of this Subcommittee in providing such authority.

With regard to our security staffing posture, this fiscal year we are increasing our civil aviation security workforce by an additional 56 personnel, and have requested 120 additional security personnel in our FY 1990 budget, which will bring the total security force to almost 700. These additional employees will facilitate our efforts to respond to the international threat and to continue to improve security here in the United States. The added staffing will enable us to improve the FAA presence in the most pressing areas of the world.

We are accelerating the delivery schedule of the thermal neutron analysis (TNA) units we have ordered for bomb detection. This remarkable system is the result of three years of FAA-directed research on an explosive detection system developed to detect all commercial and military explosives which might be concealed in checked baggage and air cargo.

Prototype TNA systems have already been tested at the Los Angeles and San Francisco Airports during June 1987-March 1988. One of the systems was electronic-based; the other was a radioactive element referred to as "CF" (Californium-based). Six CF-based TNA units will be delivered and in operation during the June 1989 to January 1990 time frame, six months ahead of schedule. We believe this unit shows great promise for operating effectively in screening passenger luggage. Our experience examining over 30,000 bags using thermal neutron analysis demonstrated that it could screen baggage with a high success rate (95%) and a low false alarm rate (4%). I should add that the high success rate was attained finding minimal quantities of explosives, and would be higher with larger amounts of explosive material. I would further note that the radioactive elements of the TNA system are well within prescribed safety levels and pose no threat to system operators or passengers. As announced last week by Secretary Skinner, the first TNA system will be deployed at New York's Kennedy International Airport.

Research is also underway on an explosive vapor detection system for checking people for explosives. Last October at Boston Logan Airport, we tested a prototype walk-up explosive detection booth designed to detect the entire spectrum of explosives which may be carried by a saboteur. The false alarm rate was exceptionally low--less than 1%--but the time to test each passenger was about 30 seconds. The manufacturer is working now on reducing that time frame to about 6 seconds per passenger. We hope to have the improved device available for testing next year.

We also are continuing work to develop improved weapons detection capabilities, including efforts for the detection of plastic weapons, and are conducting an evaluation of state-of-the-art detection equipment which is commercially available. Further, we continue to solicit new ideas from the scientific and academic community with a view toward identifying and developing additional tools that will enhance security.

All of these efforts are important to improving civil aviation security, and they will *continue.* Additionally, though, we must continue to work in the international arena to develop an international approach to end terrorism in the skies. As you are aware, the International Civil Aviation Organization (ICAO) already has in place a set of security standards and recommended practices, incorporated into Annex 17 to the Chicago Convention. One hundred fifty-nine countries have acceded to that convention. We believe the measures set out in Annex 17 are fundamentally sound, but, like our own security measures, they must periodically be reviewed and updated.

Last month, Secretary Skinner attended a Council Session of ICAO called specifically to address the sabotage of Pan Am Flight 103. Nine other ministers responsible for civil aviation and 23 additional countries' permanent ICAO representatives participated as well. Secretary Skinner spoke with each of those ministers during the two-day ICAO meeting and with many of the other senior government officials present. They made it clear to Secretary Skinner that they are willing to join us to do all that is necessary to make international civil aviation secure from terrorist acts.

As a result of that meeting, the 33-member ICAO Council unanimously adopted a resolution setting out a plan of action that, we are confident, will lead to strengthened security procedures throughout the world. As a matter of highest priority, ICAO will review existing international standards applicable to all operations to determine what changes are necessary in light of recent events. It will also consider developing a set of extraordinary measures to put in place when increased threat levels exist. Further, participants at the Council agreed to expedite research and development on detection of explosives and to explore the possibility of establishing an international regime for the marking of explosives.

Secretary Skinner has sparked other initiatives as well. He has met with the heads of all of the major U.S.-flag international carriers to discuss security issues, and listened to the proposals put forth by the Air Transport Association on the airlines' behalf. He has formed a special team in the Department to develop and evaluate a full range of concepts on how we and the rest of the international aviation community can make the skies safer and more secure, and he has made clear that, if we find that the Department's existing programs need to be augmented, he will not hesitate to reprogram funds to ensure that we can meet those needs. Further, he made the decision to amend Federal Aviation Regulation 129.25 to require foreign airlines to submit their security plans to the FAA for approval. We will use the standards and recommended practices contained in ICAO Annex 17 as the yardstick against which those plans will be measured. This will enable us to better ensure that the security precautions followed by foreign airlines serving the United States are adequate to meet the threats ascribed to those operations.

In closing, Mr. Chairman, I would like to emphasize the strength of our commitment to stop the threat of criminal actions directed against civil aviation. It is a difficult challenge, but one that we must meet. We thank this Subcommittee for its longstanding support of the FAA's aviation security efforts, and we look forward to continuing our work with you on these key issues which are so important to the traveling public.

That completes my prepared statement, Mr. Chairman. I would be pleased to respond to any questions you may have at this time.

## CRIMINAL ACTS AGAINST CIVIL AVIATION (1983-1988)

### AIR CARRIER HIJACKINGS - WORLDWIDE

| YEAR | U.S. | FOREIGN | TOTAL |
|---|---|---|---|
| 1983 | 18 | 15 | 33 |
| 1984 | 5 | 21 | 26 |
| 1985 | 4 | 22 | 26 |
| 1986 | 4 | 9 | 13 |
| 1987 | 4 | 9 | 13 |
| 1988 | 2 | 13 | 15 |

### EXPLOSIVES ABOARD AIRCRAFT - WORLDWIDE

| YEAR | U.S. | FOREIGN | TOTAL |
|---|---|---|---|
| 1983 | | 2 | 2 |
| 1984 | | 2 | 2 |
| 1985 | 1 | 3 | 4 |
| 1986 | 1 | 2 | 3 |
| 1987 | | 1 | 1 |
| 1988 | 1 | 1 | 2 |

## CIVIL AVIATION SECURITY SCREENING (1973-1988)

- Over 10 billion persons screened.
- Over 11.6 billion pieces of carry-on items inspected.
- Over 42,800 firearms detected.
- Over 19,500 related arrests.
- 118 hijackings or related crimes may have been prevented by airline/airport security measures.

## CIVIL AVIATION SECURITY SCREENING
(June-December 1988)

o Over 523 million persons screened.

o A total of 1,482 firearms detected.

  - 1,406 detected by X-ray.
  - 36 detected by use of metal detectors.
  - 40 detected by physical searches.

o Three explosive/incendiary devices detected by X-ray.

o 814 persons arrested at screening points for the unauthorized carriage of firearms or explosive/incendiary devices.

## FOREIGN AIRPORT ASSESSMENT PROGRAM

o Currently 250 airports meet the assessment requirements of the International Security and Development Cooperation Act of 1985.

o 335 assessments and U.S. carrier station inspection trips are scheduled this fiscal year.

o 773 foreign airport assessments have been conducted since 1985.

o Over 700 recommendations have been made to foreign governments to enhance/improve security in the following categories:

| | |
|---|---|
| - Access | 42% |
| - Local Airport Security Programs | 27% |
| - Screening | 17% |
| - Law Enforcement Support | 5% |
| - Checked Baggage Control | 5% |
| - Cargo | 1% |
| - National Security Program | 1% |
| - Miscellaneous | 1% |

o Assessments are measured, as a minimum, against the ICAO standards and appropriate recommended practices.

o To participate as a team member in a foreign airport assessment, FAA Security Specialists must successfully complete the FAA Security Inspections and Reports Course, or have a minimum of three years experience in domestic airport inspections. FAA Security Specialists also have a thorough knowledge of ICAO Standards and Recommended Practices. Assessment team leaders ideally have participated in a minimum of four foreign airport assessments prior to serving as a team leader.

## AIRPORT CONTINGENCY PLANS

o In July 1987, FAA required a Contingency Plan as part of each Airport's approved Security Program.

o Contingency Plans were required to be in place effective August 1987.

o Contingency Plans are reviewed as part of regularly scheduled Airport Security Inspections and are revised as necessary.

o Contingency Plans address four levels of threat, commensurate with the size and location of the airport and must be responsive to the different threat levels defined in the Plan.

o Contingency Plans contain Incident Management Procedures, including notification of appropriate Federal, state, and local law enforcement agencies.

o Contingency Plan procedures are coordinated with air carriers, emergency response agencies, and airport tenants.

## FISCAL YEAR 1990 BUDGET REQUEST

o The 120 additional FAA security personnel requested will increase the security workforce to 692. This is nearly three times the Fiscal Year 1985 level. Over 80% of FAA security staff is dedicated to international and domestic security inspections.

o Foreign Airport Assessments will continue and there will be expanded use of Federal Air Marshals on U.S. carriers operating in high risk areas. Over 500 Foreign Airport Assessments are scheduled for Fiscal Year 1990 (a 28% increase over Fiscal Year 1989).

o FAA has invested $61 Million in security research since 1980. The $9 Million requested for Fiscal Year 1990 will fund refinements to the Thermal Neutron Analysis technology and final test and evaluation of Vapor Detection Systems, as well as continuing investigations into new concepts and technology.

# Testimony of
Ambassador Clayton E. McManaway, Jr.
Associate Coordinator,
Office of the Ambassador-at-Large for Counterterrorism
Department of State

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to appear before this Committee. In keeping with the general focus of this hearing, I will limit my testimony to reviewing three broad issues:

The U.S. Government threat assessment and public notification system regarding threats to civil aviation;

The Department of State's diplomatic, research and training efforts to help prevent a repetition of the Pan am 103 tragedy; and

The ways that we incorporate aviation security concerns into our bilateral civil aviation agreements.

The callous destruction of Pan Am flight 103 on December 21, 1988 was a terrible international tragedy. The victims were not only the passengers and crew on the plane and the villagers in Lockerbie, but also their relatives and friends and all who were touched by this horrible bombing. All of us deeply regret the loss suffered by families and friends of those on Pan Am 103 and the people of Lockerbie. Let me assure all concerned that everything possible is being done to investigate this incident, bring to justice promptly those responsible, and enhance aviation security to help prevent a repetition of this tragic event.

## I. THREAT ASSESSMENT/PUBLIC NOTICE

Mr. Chairman, a central issue in countering the threat posed by terrorism -- be it aimed at civil aviation or otherwise -- involves identifying, assessing and disseminating information on possible terrorist threats. Since there has been much public and press discussion in the wake of Pan Am 103 about this subject, and particularly the so-called "Helsinki" and PFLP-GC threats, let me use this opportunity to clarify what we knew about these "threats" and when, and what we did with the information and why.

- The "Helsinki threat" was made in a telephone call to the U.S. Embassy on 5 December. It was reported to Washington and the FAA issued an aviation security bulletin on 7 December. The Regional Security Officer in Frankfurt contacted local Pan Am officials and airport security officials at the Frankfurt International Airport to alert them to the situation.
- The "threat" was to a Pan American flight from Frankfurt to the U.S. during the subsequent two week period. A bomb was to be carried onto the plane by an unsuspecting Finnish woman.
- Note that no specific flight number, date or itinerary was provided. Pan Am offers over fifty flights per week from Frankfurt to the U.S. Increased security to counter this threat was imposed for these flights. But there was no threat, not even a false one, specific to Pan Am 103.

- By 10 December the Finnish authorities determined that the "threat" was a hoax. Various agencies of the U.S. Government were apprised of this judgment. However, the enhanced security in response to this "threat" continued.
- In the wake of the Pan Am bombing this "threat" was thoroughly reinvestigated by the Finns, the U.S. and other concerned governments. It is our unanimous conclusion that the Helsinki "threat" was baseless. The caller, who is known to the Finnish authorities from similar calls he made to the Israeli Embassy, drew upon information available in the press to concoct his story. In this case, however, his "threat" was a horrifying coincidence with what someone else did to Pan Am 103.
- Concerning the PFLP-GC threat, in late October, 1988 West German authorities arrested 14 suspected members of the Popular Front for the Liberation of Palestine - General Command (PFLP-GC). In mid November we learned that among the evidence seized during those arrests was a bomb hidden in a Toshiba radio and which included a barometric pressure triggering device.
- As a result of the unusual number of suspected PFLP-GC members arrested and the discovery of such a bomb, the FAA issued on 18 November an aviation security bulletin to U.S. carriers to warn them about the presence of PFLP-GC members in Europe, the existence of this bomb, its characteristics

and to advise that increased security measures should be introduced to counter this threat. This bulletin remains in effect today.

- There was no information available that indicated that such a device would be used against a U.S. carrier, let alone more specific information concerning possible routes or actual flights.
- The British Ministry of Transport issued its own warnings about the device manufactured by the PFLP-GC on 22 November. Dissemination of this warning was broadened on 19 December. The information contained in the British warning is completely consistent with the information contained in the aviation security bulletin issued by the U.S. FAA on 18 November.

In view of the publicity that these two aviation bulletins have received, and their possible links to the destruction of Pan Am 103, let me emphasize several critical points about them:

- There is no connection between the "Helsinki threat" and the bomb made by the PFLP-GC. These are two independent and unrelated threats to international civil aviation.
- There was never any threat specifically made to Pan Am flight 103 on 21 December, or any other date.
- The "Helsinki threat" was a hoax. It had no relation whatsoever to the bombing of Pan Am 103.

- The U.S. and British security notices issued in response to the discovery of the PFLP-GC bombs are consistent. U.S. carriers were notified on 18 November by the FAA.

In explaining how we react to possible threats to civil aviation, I must take a moment to describe the broader context of how the U.S. analyzes terrorist threat information. The vast majority of terrorist threats that we receive are against U.S. government personnel or facilities as well as U.S. businesses with a permanent and visible presence overseas. The national threat alert and advisory system is designed to advise security officials of these types of threats.

Our system is based on a comprehensive, national-level process which responds to threat information received by any concerned U.S. agency and ensures that this information is acted upon in a timely manner. The objective of the system is to review and forward terrorist threat alert or advisory information quickly to those responsible for countering terrorist actions.

The national level system also includes a provision for alerting the general public of specific and credible terrorist threats via Department of State public travel advisories. We also use travel advisories, in conjunction with the FAA, to advise the American public in those situations in which aviation security in a given airport is deemed inadequate to ensure the security of passengers.

Aviation security bulletins are issued by the FAA and advise aviation security officials at U.S. carriers and elsewhere of information they need to help ensure the safety of U.S. air carriers operating throughout the world. The Department of State repeats these cables to posts affected by the bulletin so that specified officials at our diplomatic posts can assist the U.S. carriers in obtaining the cooperation of the host government in increasing security measures as appropriate. Such bulletins are not threat advisories to USG personnel are subject to a very limited distribution at Embassy. In the wake of Pan Am 103, we have restated these procedures to our embassies and consulates in the clearest possible language to ensure that all of them understand the purpose and limited dissemination of FAA Aviation Security Bulletins.

Mr. Chairman, I want to assure you, this Committee, the Congress and the American people that there is not, and cannot be, a double standard between the travel security information available to official personnel overseas and to the American public. Let me re-emphasize:

- If we have a specific and credible threat to civil aviation security which cannot be countered, we will strongly recommend to the air carrier that it cancel the threatened flight.
  - If necessary, we will issue a public travel advisory to alert the American traveling public to this threat.

## II. PREVENTING ANOTHER PAN AM 103 - DIPLOMACY

Turning now to a second broad range of issues before the Committee, the Department of State has been active on the international front to help prevent another Pan Am 103. A special meeting of the Terrorism Experts Group of the Summit 7 was called in response to the Pan Am 103 bombing. At that meeting, the U.S. argued forcefully that the bombing of Pan Am 103 demonstrated the urgent need for upgrading air security measures worldwide. There was general agreement among the Summit 7 representatives that the threat to air travel is not limited to American carriers and that the International Civil Aviation Organization (ICAO) is the appropriate forum for strengthening worldwide civil aviation security standards. Further, the Experts agreed that discussions should begin on the possibility of an international convention that would call for "tagging" plastic explosives -- e.g. those that are believed to have caused the Pan Am 103 explosion -- during their manufacturing process by those nations that produce such explosives. Following this meeting, the U.S. and Britain called for a special, ministerial-level meeting of the ICAO Council to discuss Pan Am 103 and its implication for international civil aviation. This meeting was held on February 15-16. Secretary Skinner of DOT led the U.S. delegation. Emerging from that meeting was a comprehensive workplan which will result in ICAO developing new security procedures to help prevent a repetition of the Pan Am tragedy.

To advance the exchange of information on the complex topic of tagging explosives, the U.S. hosted in Washington on 2-3 March a meeting of explosives experts from a number of allied states. At the meeting a workplan was established for further research into the basic issues involved in detecting plastic explosives. The U.S also participated in similar meetings held earlier this month under ICAO auspices in Montreal. Further progress was made in these meetings concerning the feasibility and acceptability of chemical taggants for pre-blast detection of plastic explosives.

Whether it will be possible to negotiate an international agreement regarding taggants remains to be seen. But, the common recognition by governments throughout the world that something more needs to be done to increase security from terrorist bombs represents a major step forward.

Research and Development

In terms of our own direct activities, the Department of State funds counterterrorism research and development which includes projects to help prevent aircraft sabotage. This national, interagency counterterrorism R&D program is coordinated with nearly thirty federal agencies. The FAA is one of our most important partners in this endeavor. In FY-1990 the Department of State is seeking $6 million to support this interagency program which provides seed money for a range of research and development programs which otherwise would not be funded by any particular federal agency. Included in this R&D program are projects to develop less expensive and more widely applicable detectors to identify plastic explosives. I would hope that the Members of this Subcommittee could support this funding request during House consideration of the Commerce/Justice/State appropriations bill.

International Training

The Department of State also offers a training program for foreign civil aviation security officials through its Anti-terrorism Assistance Program (ATA). Through ATA, the Department of State helps to ensure that participating foreign governments have an effective aviation security program including well-trained staff, supplemented by a variety of technical aids. Since its inception in 1983, the ATA program has trained over 650 students from 28 nations in Advanced Civil Aviation Security or Airport Police Management.

## III. BILATERAL CIVIL AVIATION AGREEMENTS

A final set of issues relevant to consideration today is our bilateral civil aviation agreements. The Department has sought improved security for international air travel by including security articles in each of the aviation bilateral agreements the U.S. negotiates with our foreign aviation partners.

Our model security article commits each party to:

- Protect civil aviation on the basis of existing international law.
- Provide mutual assistance in preventing threats to civil aviation.

- Act in accord with several international conventions which deal with specific threats to civil aviation.
- Require their national airlines and other operators to conform to ICAO's various security provisions.
- Observe the security provisions of the other party as a condition for entry into the territory of the other party, and further requires various inspection measures be taken to protect planes, passengers and crews as well as cargo and aircraft stores prior to and during boarding.
- Facilitate, in the event of an attack on civil aviation, communications and other measures intended to end the problem quickly.
- Recognize that the agreement provides a legal basis for one Party to impose restrictions on the airlines of the other Party in the event the second Party has not complied with the provisions of the article.

Since 1985 when the U.S. began this effort to incorporate these provisions into our bilateral civil aviation agreements, these modifications have come into effect with 22 nations and agreement on text has been reached with another 27 countries. We are working on incorporating these changes into civil aviation agreements with more than 30 other states with which we have such agreements.

Mr. Chairman, in closing let me say that preventing another tragedy such as the Pan Am 103 bombing is now and will remain a permanent preoccupation of the concerned agencies of the U.S. Government. With regard to those responsible for Pan Am 103, I am confident that we will eventually identify them and that we will then do everything in our power to bring them to justice.

I look forward to your questions.

Mr. **Oberstar**. Shortly after the PanAm incident I happened to be interviewed, along with Ray Kline, former Deputy Director of the CIA, about this matter of security. I think he made a point that was very telling and very important for closing the circle on this panel's testimony and supporting what Ambassador McManaway said. That is that we have to get to terrorism at its source, and that means, as you put it, pro-active. That means getting out, finding where they are, finding state-supported terrorism and attacking it at its source, using all the devices that we have at our disposal.

The FAA is not an intelligence-gathering agency. It must depend on intelligence provided to it by our other intelligence services, and once provided with that information it can act properly. Beyond intelligence gathering is getting at those who have destructive schemes in mind, and that's probably the most effective element of the whole security apparatus.

We thank you very much for your testimony and ask you to remain available for the executive session later today.

We have a number of other witnesses and panels whose testimony is going to be very interesting and important to completing the scope of the hearing. We will recess for roughly one hour and resume at 1:45.

The subcommittee stands in recess.

[Whereupon, at 12:45 p.m., the subcommittee recessed, to reconvene at 1:45 p.m. this same day.]

## AFTERNOON SESSION

Mr. **Oberstar**. The subcommittee will resume its sitting.

Our next panel of witnesses includes Mr. Richard Lally, Director of Security, Air Transport Association; Mr. Homer Boynton, Managing Director for Security, American Airlines and Vice Chairman of the Security Committee of the Air Transport Association; Mr. Robert Kierce, Staff Vice President for Security at Trans World Airlines; Mr. Robert Baudter, Manager for Corporate Security at United Airlines and Chairman of the Security Committee for the ATA; Mr. Edward F. Cunningham, Managing Director of Corporate Security for PanAm; Mr. Gerald Fitzgerald, Assistant Director for Aviation, Port Authority of New York and New Jersey, and a member of the Board of Directors of the American Association of Airport Executives; and Mr. Wilfred Jackson, Director of Airport Operations for the Baltimore-Washington International Airport and Chairman, Operations, Safety and Security Committee of the Airport Operators Council International.

That's a very impressive list of witnesses. Would you please take your seats at the table?

We are expecting Congressman Dan Burton, whose testimony will be welcome at such time as he does arrive.

Mr. **Oberstar**. Mr. Lally, you are the leadoff witness on this panel. We welcome you. We welcome all of you and thank you for your participation in the hearings.

## TESTIMONY OF RICHARD LALLY, DIRECTOR OF SECURITY, AIR TRANSPORT ASSOCIATION, ACCOMPANIED BY HOMER A. BOYNTON, MANAGING DIRECTOR, SECURITY, AMERICAN AIRLINES AND VICE CHAIRMAN, SECURITY COMMITTEE, AIR TRANSPORT ASSOCIATION; ROBERT R. KIERCE, STAFF VICE PRESIDENT, SECURITY, TRANS WORLD AIRLINES; ROBERT F. BAUDTER, MANAGER, CORPORATE SECURITY, UNITED AIRLINES AND CHAIRMAN, SECURITY COMMITTEE, AIR TRANSPORT ASSOCIATION; EDWARD F. CUNNINGHAM, MANAGING DIRECTOR, CORPORATE SECURITY, PAN AMERICAN WORLD AIRWAYS; GERALD FITZGERALD, ASSISTANT DIRECTOR FOR AVIATION, PORT AUTHORITY OF NEW YORK AND NEW JERSEY AND MEMBER, BOARD OF DIRECTORS, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES; AND WILFRED A. JACKSON, DIRECTOR OF AIRPORT OPERATIONS, BALTIMORE-WASHINGTON INTERNATIONAL AIRPORT AND CHAIRMAN, OPERATIONS, SAFETY AND SECURITY COMMITTEE, AIRPORT OPERATORS COUNCIL INTERNATIONAL

Mr. LALLY. Thank you, Mr. Chairman. You did introduce my colleagues who are present today from the major airlines, and I would just like to note that they are here to provide whatever assistance and information they can to the committee, both in this session and in the executive session, and they are on standby at your call to meet with you or other members of the committee or the staff as time progresses to provide whatever additional assistance they might be able to furnish.

Mr. OBERSTAR. Thank you.

Mr. LALLY. We have a formal statement that we have submitted for the record. I would like to summarize or highlight portions of it for the committee at this time.

Mr. OBERSTAR. Please proceed.

Mr. LALLY. The airlines have redoubled their efforts in the wake of the bombing of Pan Am Flight 103, instituting even tighter security screening procedures for international flights than were in effect before.

The security challenge faced by the airlines today is formidable, and the airlines cannot meet that challenge alone. They are commercial enterprises, not intelligence agencies. They rely on their Government and allied governments to help track and assess the many security threats made against commercial airlines each year. They very much need the Government's help, including the direct assistance of the Federal Aviation Administration's security specialists, to provide adequate security in high-risk areas of the world.

The nature of the security threat we face today is far different and far more dangerous from what it was in the early 1970s when we first began screening passengers and their carry-on baggage. Back then, hijacking was the primary threat; now it is sabotage by international terrorists seeking to influence the behavior of governments through acts of violence against commercial aviation. Modification of government policy is their real goal. Commercial aviation is merely a surrogate target.

Meeting this new threat both warrants and requires greater Government involvement in airline security. The U.S. Government must go beyond its traditional regulatory role and become an active partner of the airlines in security.

We have four specific recommendations to offer. In making these recommendations we do not mean to suggest that it is solely the Government's responsibility to improve security. The airlines must do their part, and we can assure you that they will.

The first recommendation is that the Federal Aviation Administration should concentrate its own security resources where they are needed most. Congress substantially increased FAA's budget for security following the terrorist hijacking of a TWA jetliner three and a half years ago. FAA subsequently hired more Air Marshals and security inspectors. This morning we heard about additional increases in the FAA's security workforce.

But these resources must be deployed in areas where the threat of terrorism is the greatest, specifically to Europe, the Middle East, and the Far East. We are not suggesting that the FAA abandon its domestic responsibilities, but we are suggesting that it must assign more of its security people to ground duty in support of airline security activities at high-risk airports overseas.

The second recommendation we have is that the Government must speed the development and the commercial availability of emerging new technologies that detect hidden explosives. FAA has achieved promising results in recent tests designed to detect vapors emitted by explosives. It also has achieved significant breakthroughs in the development of thermal neutron analysis, a technique which appears capable of detecting all known explosives in the quantities that are of concern to commercial aviation.

The FAA recently announced that it will buy six thermal neutron analysis machines this year, and will do all that it can to bring this new technology on line quickly. We believe that the FAA should increase that purchase order, and that the new machines—as well as the two existing units that the FAA has been using for tests here in the United States—be airlifted to Europe as soon as possible.

In addition, the Government should help nurture these new screening technologies to maturity by providing seed money for the first industry buy of state-of-the-art equipment. FAA provided funds to the airlines in the early 1970s to speed the deployment of effective metal detectors at U.S. airports. Financial assistance now is even more appropriate and urgently needed in meeting today's far more dangerous threat of terrorism.

The Air Transport Association has developed a preliminary estimate of the explosives detection equipment requirements needed to support U.S. airline operations at high-threat foreign airports, as well as a preliminary estimate of the costs that would be involved. A detailed breakdown of these estimates is attached to our formal statement.

In summary, the preliminary estimate is that 66 thermal neutron analysis units and 171 vapor detection units are needed to meet the security requirements of eight U.S. airlines at 45 high-threat airports in Europe, the Middle East, and the Far East. The costs are estimated at $49.5 million for the thermal neutron analysis units, and $17.1 million for the vapor detection units, for a total preliminary cost estimate of $66.6 million.

We believe that Federal funding for this equipment is justified and warranted, and that that Federal funding could be provided by means of a special appropriation from the Aviation Trust Fund for this purpose.

Our third recommendation is that the United States accelerate efforts to strengthen international standards on security. The ICAO has made considerable progress in that direction in recent years, but more needs to be done. ICAO should lay out tougher security standards for all nations and, importantly, it should be given the resources it needs to evaluate security programs around the world and the authority it needs to impose sanctions against nations that fail to live up to established standards.

Our last recommendation is one that help ensure protection that U.S. travelers deserve until the tougher international standards are in place. That is that the FAA impose the same stringent security requirements on foreign air carriers serving the United States as it imposes on U.S. carriers.

On December 29, FAA mandated heightened security measures for U.S. airlines serving Western Europe, the Middle East, and the Far East. Those same security steps were not required of foreign airlines serving the United States from the same airports, even though some 50 percent of U.S. citizens who travel abroad travel on those foreign carriers.

We think that omission, the coverage of security requirements for foreign air carriers, is a significant gap in the security program of the FAA.

On the domestic scene I would just like to report that in the 15 years since passenger screening began, there has only been one U.S. hijacking of a major airline involving a real firearm smuggled through the screening system. The U.S. airlines screened more than 1 billion people last year, four times the population of the United States, and the system detected some 3,000 firearms, leading to the arrest of about 1,500 people. By FAA estimates, 118 hijackings have been prevented since the passenger screening system became mandatory.

In other words, the passenger screening system in the United States is working well. It is accomplishing what it was designed to do, which is to prevent hijackings. However, meeting the new threat of international terrorism clearly requires new strategies calling for greater Government involvement in airline security and greater focus on airports and airline operations overseas. Government must share the burden of security. It must help the airlines shore up their defenses. With that kind of help, and if Government can target its resources where the threat is the greatest, I think we can go a long way toward shielding travelers against the scourge of terrorism in the years ahead.

Thank you, Mr. Chairman.

Mr. Oberstar. Thank you very much, Mr. Lally. We greatly appreciate your testimony. As I said earlier, the written statement in its entirety will appear in full in the record.

Do any of your associates have remarks to make at this time?

Mr. Lally. I think they do not, sir, but they may have some comments to contribute in the executive session.

Mr. **Oberstar**. I particularly appreciate your reference to the passenger screening system. I think it should be emphasized that this has proven to be a very effective deterrent. As I mentioned at the outset of the hearings, we tend to forget that from 1969 through about 1973 or 1974, we were experiencing one hijacking every two weeks. Then came the magnetometers and the other detection systems and the careful screening of baggage, and in the years since 1969 we have screened at American airports alone 9.5 billion pieces of luggage, some 9 billion passengers, and collected 41,000 firearms and thousands of bombs or incendiary devices, and made 14,000 arrests. People are still in prison for violating domestic security.

I think the record has to be cited, the enormity of it and the immense numbers of people and equipment and baggage processed through this system so that people understand that a very significant measure of security has been provided at domestic airports and that we are doing as fine a job as the state-of-the-art permits to be done. That's not to say that it can't be improved. The FAA has imposed two waves of significant fines on airlines for failure to achieve desired levels of detection. We're talking about levels above 95 percent. We think that kind of check system is necessary.

But at the very time that we were perfecting the passenger screening systems in the United States and abroad, the terrorists were moving on to more sinister means of, as you put it well, "making their point" on international policy for or against a particular cause. We need to be a step ahead of the game. Your point is again well taken about the FAA concentrating its resources where they are needed the most. The FAA is not an intelligence-gathering agency. It is an agency configured to respond to intelligence gathered by other sources.

I would like you to be a little more specific, though, on what you think are the most appropriate roles for the FAA. Surely research and development is appropriate, but what are the other appropriate roles for the FAA? And how do those responsibilities mesh with the role of the private sector?

Mr. **Lally**. I think the United States Civil Aviation Security Program is the one that, as you indicated, has been extremely successful. It is a program that involves FAA as the lead Government agency. It is FAA that defines the security threat and prescribes the measures that need to be taken to combat that threat. They assist and coordinate in the implementation of those measures. As a bottom line, they have the regulatory authority to enforce the requirements.

In addition, they serve a most important role in being the interface for aviation with the national and international intelligence community. The intelligence factor is an extremely important one. The system we have in place is very, very comprehensive and one that can be refined and tailored in response to intelligence to react to various changes in the nature and level of the threat.

We believe that FAA performs that job—that is their role and they do it rather well. The airlines, on the other hand, are primarily responsible for their aircraft, for the people and things that go on it, and for maintaining a secure inflight environment.

The airport operator, the other key player in the United States system, is responsible for establishing and maintaining a secure ground environment into which the aircraft come and go, and they are also responsible for arranging for the presence of local law enforcement to put some muscle behind the programs as needed. So I think that arrangement has worked well.

When we are talking about today's threat, though, I think it is important to note that the major threat is sabotage, and the major threat is overseas. That's where we need the additional help of our Government in the form of FAA security inspectors, who are very, very talented and can really be of major assistance. We're not talking about the FAA inspector performing the duties of the airline in terms of conducting screening and baggage inspection, but the airlines operate overseas in a foreign environment. They operate at the pleasure of host governments and airport authorities. The FAA presence at those locations can provide a great service in dealing with the host governments and making sure that the security programs at that airport are adequate and proper so that that chore is not left to the individual airlines to do one-on-one with the foreign governments.

The mere fact that the FAA is there will communicate a very, very significant deterrent. It will communicate to those nations, and hopefully to terrorists, that where U.S. flag carriers fly they fly with the full protection of the United States Government. So their presence is a significant deterrent and their activities can be of great benefit to oversee the adequacy of and necessity for security programs to protect U.S. airline operations.

Mr. OBERSTAR. Then in the overseas role you would see the intelligence-gathering agencies and the FAA together as a front line of defense, providing information and guidance for the airline companies and the airport operators overseas who can act on that information?

Mr. LALLY. Yes, sir, but I think it can go beyond that. Again, it's not to assume the airlines' responsibilities, but if we have a threat that is identified and a threat that is being responded to, then if there is a "hit," so to speak, in responding to that threat where something is found, something is suspicious, I think that the presence of the FAA people can help in responding to that specific threat not only individually as FAA inspectors, but jointly with the airlines and with the host governments.

I see more of not only technical assistance, not only intelligence, not only international liaison, but I see some hands on, shoulder-to-shoulder kind of activities that can be conducted with the airlines.

Mr. OBERSTAR. Very good.

How much of investment are the carriers making in security? And how much of an investment—if the Airport Operators Council could tell us this—are the airports themselves making in security? I know that each has a unique role, each fits into the security picture in a different way, that each is making substantial investments.

Mr. LALLY. I can only give you an industry estimate that is based, really, on two figures. One, the costs associated with the passenger screening process in the United States alone is estimated at approximately $250 million. If were to add the costs beyond passenger screening, particularly with the extraordinary measures being conducted abroad, I would estimate that the cost is at least in the $500 million range. I can't provide a more precise estimate and I doubt that anyone could provide it.

Mr. **OBERSTAR**. Do the airport operators have a separate comment?

Mr. **JACKSON**. The airport operators also have a considerable amount involved in airport security. Although we do not become involved with passenger screening per se, we are responsible for supplying and furnishing the location for that screening. The overall airport security program belongs to the airport operator and costs many thousands of dollars per year to operate, as well as the initial cost of implementation and facilities.

Mr. **OBERSTAR**. Do the airport operators and the airline companies play a role with the FAA in developing technology to deal with the security threats, such as magnetometers and the thermal neutron analysis and vapor detection systems and others? Are you called in for counsel or in some kind of advisory role with the FAA in this respect?

Mr. **FITZGERALD**. I could speak to that for the situation at Kennedy Airport.

We have established our own Airport Security Council that addresses these issues on a monthly basis. It brings together all of the interested agencies on the airport, the FAA included, the airlines, and the Port Authority, and we address issues of security.

I think in terms of the R&D effort, however, we do rely on the FAA to spend the bulk of the funds to develop the product, but I feel we have had a very adequate opportunity to comment on those and to offer our opinions as to what we think the airport operating problems would be as those kinds of products are developed.

Mr. **OBERSTAR**. Thank you. I think that's very important.

My time has expired.

At this point, as I indicated at the outset of the hearing, we will take testimony from our colleague, Congressman Burton, who is here after breaking other committee responsibilities. We would like you to take your place at the witness table.

We thank you very much for being with us today and for interrupting your schedule to rejoin the committee. We welcome your testimony. We know that you have introduced legislation dealing with this matter, and this is your opportunity to discuss it with us.

## TESTIMONY OF HON. DAN BURTON, A REPRESENTATIVE IN CONGRESS FROM INDIANA

Mr. **BURTON**. Mr. Chairman, I thank you and the committee very much for giving me an opportunity to discuss my legislation and the reasons for it.

Mr. Chairman, terrorist attacks against civilian airlines have increased dramatically in the last decade. Plastic explosives have become the weapon of choice for international terrorists in the 1980s. The horrible explosion that killed 273 passengers on Pan Am Flight 103 last December over Scotland was widely believed to be caused by plastic explosives concealed in a radio.

Plastic explosives were also blamed for previous air disasters, including Korean Flight 858 in November, 1987, which killed 115 people; a TWA Athens-bound airliner in 1985, which killed 3; and an Air India jet that same year which killed 329.

Earlier this month the brutality of terrorism was brought home. The wife of the Commander of the U.S.S. *Vincennes* narrowly escaped death when a pipe bomb exploded in her van. This explosion shattered the myth that terrorists won't attack within the continental United States.

Plastic explosives have increasingly created a terrifying dilemma for American airport officials. Although new technology is being developed, plastic explosives can be easily concealed from current x-ray machines used to screen carry-on luggage and passengers. Explosives such as the widely-used Semtex can be camouflaged in everyday possessions like cans of shaving cream or tubes of toothpaste. Semtex can be set off by a detonator no bigger than a matchstick. These detonators are very difficult to identify and can easily escape unnoticed.

Fortunately, Semtex gives off an odor that can be detected by trained dogs. My legislation would amend the Federal Aviation Act to require the use of so-called "sniffer dogs" at major international airports in the United States to detect plastic explosives. The dogs would be available to check all baggage on any airline which has received a recent terrorist threat, or for random use throughout the airport security area.

Obviously, there are not enough dogs to check every single piece of luggage, but the mere presence—and I want to emphasize that, Mr. Chairman—the mere presence of these dogs, especially if given a high profile, would help deter terrorists from placing explosives in carry-on luggage.

The FAA is now developing more sophisticated instruments, as you have heard today, to detect plastic explosives. A Thermal Neutron Analysis System, commonly known as TNA, has been invented to uncover sophisticated plastic explosives in checked luggage. However, according to the FAA, it will take at least one year before TNAs are available to all major airports, and they will cost approximately $750,000 each.

Screening passengers and their carry-on luggage is a more pressing need. A vapor detector is now being devised for this purpose but it is still another two to three years away. Each vapor detector will cost approximately $125,000.

Covering all 25 major international airports will eventually require 66 TNAs and about 200 vapor detectors. The total estimated cost of this would be around $74.5 million.

What will be used to detect plastic explosives until these machines can be fully implemented? Dog teams would be a practical way to fill the current security void in a cost-efficient manner. I might add that the FAA is using sniffer dogs to some degree right now.

The total cost of providing two teams for each of the 25 major airports would be roughly $2 million. This takes into account the initial $10,000 cost of training each dog team, the salaries of the officers who will handle the dogs, and the upkeep of the dogs. This is substantially less than the $75 million which will be spent on the new systems. I'm not saying we don't need the new systems, but as an interim measure, Mr. Chairman, I think this would be very beneficial and would deter many terrorists.

The bottom line is this, Mr. Chairman. We must take preventive measures now before more Americans are murdered. The new technology being developed is reassuring for the future, but we cannot leave ourselves vulnerable to terrorist attacks while we wait. We need sniffer dogs, and we need them now.

Mr. Oberstar. I thank the gentleman for that recommendation and for the time and effort he has devoted to this subject. We welcome all the counsel and guidance that we can get on this issue.

As I understand it, your legislation is a directive to the airport operators. Is that correct?

Mr. Burton. Yes, and the FAA. Yes, sir.

Mr. Oberstar. And you include the FAA in this. I think the FAA probably has all the authority they need to institute that procedure. They probably would tell us, but we will ask them in executive session later today whether they need any more money to do so.

But you are proposing a much less costly alternative or option, and one that we certainly shall pursue.

Mr. Burton. Mr. Chairman, I talked with the FAA people in my office last week. As I said before, it would cost approximately $2 million for this initial phase of sniffer dogs.

I don't suggest or recommend that this take the place of the new technology being developed, but as I said in my statement, it is going to be one to three years before this new technology is actually put into place in these various airports.

It is my contention that during this one to three year period we need to be doing something. Sniffer dogs do work. They are being used to some degree by the FAA right now, and I think they should be used more extensively—not only to catch terrorists, but as a deterrent. If you see those dogs in these airports, even though they work on a limited scale, I think it would be a real deterrent to terrorists who might try to put those explosives on planes.

Mr. Oberstar. Earlier today we raised the issue and explored the deterrent effect of taking all those precautionary measures that are wise and prudent and sensible, some of which are visible to the public, that in and of themselves operate as deterrents. So we shall pursue this matter further.

Are there questions of our witness? The gentleman from California?

Mr. Packard. One quick question, Mr. Chairman.

Much of our problem is overseas airports. Would you suggest that we put our own dogs there, or that we cooperate with foreign airport operators? Or how do you suggest we deal with that? Or are you only looking at domestic problems?

Mr. Burton. My legislation, Representative Packard, is for airports within the continental United States. But I would suggest that we should seek to work with foreign governments to use sniffer dogs in those airports which are considered high risk, and there are many of them overseas, during the interim period between now and when we get this new technology on line.

So yes, I would suggest that the committee pursue negotiations with foreign governments to use the same type of operation there as well as in the United States.

Mr. OBERSTAR. The gentleman from Tennessee?

Mr. CLEMENT. You mentioned, concerning these sniffer dogs and relating that to the McCurdy bill, how much it would cost. As I understand it you are only talking about using those sniffer dogs in 25 major airports where, I believe, Congressman McCurdy was talking about 71 hubs in the United States. So we're not necessarily talking about the same territory that would be covered.

Mr. BURTON. Well, the 25 airports to which I referred are involved primarily with international flights. They are the major international airports in the United States. But I have no objection to using sniffer dogs at many of our domestic airports because I believe that terrorists in the future might very well attack a domestic flight flying people to and from major cities within the continental United States.

So in the short run, the next one to three years, I think we should have them at least at these 25 major international airports, but I would not object to spending an extra $2 million to $4 million to have them at the other airports, as well.

Mr. CLEMENT. Now, for what purposes are these sniffer dogs going to be used?

Mr. BURTON. Well, they would be where the metal detector device is at the gate when the luggage goes through there. They would be there to sniff, if you will, the various pieces of luggage coming through there to try to detect plastic explosives that may be concealed in those bags.

Mr. CLEMENT. What about these pipe bombs?

Mr. BURTON. We have been told that the sensitivity of the sniffer dogs to these plastic explosives is such that they can be detected even within metal containers.

Mr. CLEMENT. But you are also saying that just by the presence of the dog, being there in itself would deter——

Mr. BURTON. I think it's a two-fold deterrent. These dogs only work for given periods of time; I won't go into the exact time because you may want to talk about that in closed testimony, but some of these dogs work for a limited period of time. But the very presence of the dogs, or dogs on a leash at the airport that may not be doing the sniffing, would be a deterrent. If you were a terrorist and you were going to put a plastic explosive on a plane and you knew that there were sniffer dogs at many of our airports, and you saw a dog on a leash with a security guard, I think you would be a little reluctant to take that device through the entrance to that plane.

Mr. CLEMENT. Now, when you were talking to the FAA did they say they were going to do this at the 24 airports?

Mr. BURTON. No. The FAA indicated that they use sniffer dogs now, but not for carry-on baggage. They use them to spot-check international flights behind the scenes when the bags are brought down to be put on the plane.

I was urging them to use the sniffer dogs in a highly visible way to deter terrorists, as well as to pick up terrorist bombs that might be getting through these devices.

Mr. **Clement**. All right.

Thank you, Mr. Chairman.

Mr. **Oberstar**. The gentleman from New York?

Mr. **Boehlert**. Mr. Burton, I thank you for your testimony.

I would like to enlist you in my club, and that club is to get the Aviation Trust Fund off budget. Could I get your point of view on that?

Mr. **Burton**. Well, that's one thing that I hadn't given much thought to. The Aviation Trust Fund as I understand it, Mr. Boehlert, is to be used specifically for aviation and aviation safety. Since it is for that specific purpose, I think we ought to use it for this. I probably could be enlisted to support your position.

Mr. **Boehlert**. Thank you very much.

Mr. **Burton**. Did you walk me down that line? [Laughter.]

Mr. **Boehlert**. I marked you in the plus column.

Mr. **Oberstar**. I said to the gentleman, all we needed were five more votes. We came that short in the last Congress, so we promise you the dogs will be funded out of the "freed" Aviation Trust Fund. [Laughter.]

I thank the gentleman for a very serious presentation and a very useful one.

Mr. **Burton**. Thank you.

### MR. LALLY, ET AL.—Resumed

Mr. **Oberstar**. Mr. Lally, please resume your position.

Again, I want to inquire of the airport operators, if they have a separate statement to make. I fear you misunderstood my earlier invitation to present your remarks.

Mr. **Fitzgerald**. We do have separate statements to make.

Mr. **Oberstar**. Then let's take your statement at this time.

## TESTIMONY OF GERALD FITZGERALD, ASSISTANT DIRECTOR FOR AVIATION, PORT AUTHORITY OF NEW YORK AND NEW JERSEY, AND MEMBER, BOARD OF DIRECTORS, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES—Resumed

Mr. **Fitzgerald**. Mr. Chairman, I am Gerry Fitzgerald, the Assistant Director for Aviation of the Port Authority of New York and New Jersey, and currently a member of the Board of Directors of the American Association of Airport Executives. On behalf of the Board and our membership I would like to thank you for this opportunity to testify on aviation security matters, and I would request that our written statement be entered into the record.

Aviation security is a vital component of the Nation's air transportation system. AAAE and its members have always been active participants in the efforts to improve security. The airports and airlines have worked hard at improving security and will continue to cooperate with the Federal Aviation Administration on implementing programs that will improve security procedures.

The security situation has changed dramatically in recent years as the threats shift from hijacking to terrorist attacks. AAAE believes true aviation security can only be achieved by controlling terrorism at its source. Airports can deter terrorism, but it is the role of our Government to prevent terrorism attacks on our Nation and its citizens.

The FAA must continue to conduct studies to assess the vulnerability of international and U.S. airports to current security threats. This essential first step allows both FAA and the airport operator to assess properly just what measures are required to deal effectively with perceived threats. This also allows the FAA, in close cooperation with the airports and airlines, to determine the best way to employ state-of-the-art technologies and operational procedures in the most economically viable and responsive manner. You simply put your resources where they will do the most good.

On February 8th, the FAA adopted the final rule on access to secured areas of airports, and in our opinion failed to look beyond the Washington horizon to examine the implications of this well-intended proposal. In their efforts to respond to international events, the FAA issued a rule, imposed an implementation date, established fines for violations, but they have yet to issue an advisory circular to explain the rule or provide their regional offices with enough information to answer airport questions.

The airports across this country are very disturbed by the impact of this new rule, for many reasons.

We feel the FAA seriously underestimated the physical scope of its proposal, the cost of implementing it, and they failed to consider adequately the practicality of implementing a rule which does not address many of the critical elements. Most importantly, they failed to address the issue of where the money will come from. Let me just briefly discuss these three points.

The physical scope—the rule suggests an average of 128 access points for an airport that screens more than 25 million people annually. As a point of reference, Kennedy International Airport alone has 1,500 access doors. At LaGuardia we have 750 access doors, and at Newark International Airport we have approximately 1,000, as compared to their average of 128.

The FAA suggests that the cost will be about $170 million to implement the rule for the entire 279-airport facility system. Given the vagueness of the rule and the lack of clear guidance as to what actually will be required and how extensive these systems must be, we believe the cost could be as much as ten times the amount estimated by the FAA.

For Kennedy Airport alone, the cost of installing access control systems will exceed $27 million. We are estimating a cost of approximately $18,000 per door. This does not include the costs for cargo facilities or hangar facilities, which will most certainly be much more than the $18,000 per passenger terminal door.

In addition to this, the airports must pay the annual costs associated with operating and maintaining the systems, which will be millions of dollars per year imposed upon us as operating costs.

After the cost, the rule itself is vague. It fails even to define what is a secured area. It fails to tell us how to adequately secure cargo doors or hangar doors that need to be open to service aircraft. It fails to address exclusive areas or the accountability of other tenants and users on the airport.

We think the lack of clarity in the new rule will result in immense and largely unnecessary security around general aviation and Federal areas, including those military installations that share civilian facilities.

We also note that the rule is totally silent on compatibility of systems across the country.

There is no guidance as to what airline crews should be doing as they pass through these systems. The simple task today of delivering airport employees to their work sites would have to be handled through each employee on a bus individually passing their ID cards through a checkpoint, which really impacts on the ability of the airport to maintain maximum productivity from its employees as they are forced to go through these systems. Nor is there any guidance as to how a discharged employee should be handled in terms of immediately notifying all systems across the country that he is no longer actively employed.

We feel in this instance that we have a bureaucratic response to what basically is an international political problem. We feel the rules that have been formulated have been done without thinking through the operational implications. And of course, the procedures are dictated without regard to the impact of funding or other vital elements in the national transportation system.

Practicality needs to be inserted into the process so that those of us who will be charged with making it work will have a chance of succeeding.

The FAA has failed to address adequately how airports are to pay for these systems and meet the very short time frame of the rule. Unless Congress and the Federal Government provide additional funding to help airports meet this new requirement, monies will have to be diverted from other airport safety, security, and capacity projects that we now have on the agenda.

We feel that if it is in the national interest to require access control systems at all U.S. airports, then it is certainly the Federal Government's responsibility to provide funding assistance from the Aviation Trust Fund to implement these systems.

AAAE believes a wiser course of action should be taken. We believe that the problems we have identified should be considered during a pilot access control program with operational testing at a limited number of airports. With this approach we could establish the best technology, the most effective use of such technology, and the most cost-effective installation techniques. The concept of a pilot program was endorsed last year by the Senate Transportation Appropriations Subcommittee, but the FAA disregarded this advice and issued the rule.

Pursuit of such a program would also allow for the development of a reasonable implementation timetable with operational problems addressed to avoid the possibility of committing very limited resources and then discovering a short time later that they have been installed incorrectly or not installed efficiently.

In conclusion, let me say that the impact of the access rule imposed by the FAA has been seriously underestimated in both its practical application and its cost. In today's fiscal environment we should not force the cities of America into the use of limited resources without thinking through the implications for all of our airports without giving those charged with the new responsibilities time to develop implementation times and without insisting that the Federal bureaucracy listen to the concerns of those who will be affected.

The Federal Government must continually redefine the nature of the threats to aviation security and determine the vulnerability of airports and share timely information quickly when the threats or dangers to airports are perceived. AAAE urges this subcommittee to seek a dedicated source of funding for all civil aviation security and direct the FAA to enhance security teamwork and to deemphasize an apparently growing punitive attitude toward airlines and airports.

Thank you, Mr. Chairman.

Mr. **Oberstar**. Thank you very much. You have certainly raised some very serious matters that deserve careful consideration, and you raise some matters which we are going to have to bring up with the FAA directly.

Mr. **Oberstar**. Mr. Jackson?

Mr. **Jackson**. Thank you very much, Mr. Chairman and members of the subcommittee. I am Bill Jackson, Director of Operations for Baltimore-Washington International Airport. I am pleased to be here today on behalf of the Airport Operators Council International in my capacity as the Chairman of AOCI's Operations, Safety and Security Committee.

AOCI represents the local, regional, and State governmental bodies that own and operate the principal airports serving scheduled airlines in the U.S. and throughout the world.

We want to thank you for holding the hearing on a very important and sensitive issue and for giving us the opportunity to express our views. Our views, you will find, very much overlap those of Mr. Fitzgerald and the AAAE.

Achieving aviation security is a very complex and costly problem. Every airport has a unique situation, unique facilities and needs, and faces a unique set of threats which multiply the complexity and, in turn, the costs of solutions.

Airport operators have not been idle. We have modified our facilities, installed new equipment, added personnel, and actively worked with airlines, law enforcement agencies, and the Federal Aviation Administration to improve security. U.S. airports today have complied with all the safety and security requirements of the FAA.

Until now, those requirements have been logical, meaningful, and doable, as well as cost-effective. However, the DOT–FAA have taken a step recently that we consider to be precipitous in issuing the final rule on access to secure areas of airports.

We strongly support improved security and, for that matter, the underlying purpose of the access control rule itself. The DOT-FAA rule addresses a valid although very limited possibility, that of the threat from within by a disgruntled or deranged employee. To our knowledge, that threat has come to fruition only once in the past 60 years of commercial aviation history, in the 1987 PSA incident in California.

While improved systems most certainly deal with that element, we believe that the infinitely greater threat is from without: the various forms of terrorism, which have gone virtually unaddressed in this rule.

What is the threat? We ask the FAA, and they do not answer.

There are very serious problems with the rule as written. These same problems existed when the rule was just a proposed rule, and I might add that the aviation industry does not believe this rule hits the security mark for three reasons, as Mr. Fitzgerald mentioned.

One, the FAA grossly underestimated the cost of the system.

Two, the time required to design and install a computer-based access control system was significantly underestimated by the FAA.

And three, the requirements laid down for the system's operation are impractical and basically unachievable at this time.

I will not dwell on the cost of the system as that has been very well covered.

As a point of reference for airport sizes, I would like to point out that Baltimore-Washington International Airport screened only approximately 6 million airports last year. We are a Phase II airport, yet we have a greater number of access points than 128 just from our terminal building alone, to mention nothing of vehicle gates, air cargo buildings, and general aviation facilities.

Minneapolis-St. Paul, as a point of reference, has over 500 access points, and they estimate that their cost will be in excess of $9 million.

The second problem area is the installation time requirement. For an airport the size of Minneapolis-St. Paul to be expected to have a system designed, procured, installed, and operational within 24 months of plan approval of the FAA is unreasonable. That airport estimates more than 500 access points to the AOA.

BWIA has now and has had a computer-based and computer-controlled access system in operation since 1974. The system was updated in 1982; in the spring of 1987, budgeting actions started for a second update of the system. In the fall of the same year, 1987, actions started for the design of that system update. A request for proposal was published in the summer of 1988; 14 bids were received and evaluated by November of 1988. Final negotiations were completed with the winning company in January, 1989, and contract execution began in February, 1989. The updated system is expected to be on line by the end of September, 1989. From start to finish that is more than two years' effort just to update an existing system.

The third problem area is how to establish a system that will validate every card of every person entering the air operations area every day. We do not know how this can be done in the air cargo and general aviation areas. Air cargo operations require the movement of equipment and people from airside to streetside and back again all during the day and the night. Cargo buildings are massive and contain vast numbers of doors. Who will be responsible for these areas?

General aviation areas are equally difficult by virtue of aircraft owners, operators, and transient crews. The FAA has said that all of these people in the air cargo area and the general aviation area must have identification cards, and those cards must be validated each day.

The FAA has given no guidance as to how this can be accomplished. Without proper guidance, the access rule cannot be imposed.

In the spring of 1988 the Airport Operators Council International was joined by the American Association of Airport Executives, the Air Transport Association, the Regional Airlines Association, and the Air Line Pilots Association in unanimously voicing our concern for the proposed rule. We stand together today for all of the same reasons as herein enumerated.

We jointly urge the Federal Aviation Administration to delay the access control rule and instead commission a fully-funded pilot program for four airports, install computer-controlled access systems at the four selected airports, and operate them for 18 to 24 months in order to glean answers to the many unresolved questions of today. We believe this is a prudent approach to a very important program.

May I emphasize that a security control access system is an outstanding management tool and a great addition to any good airport security program. The access system does not make an airport secure; it is only one building block in the overall security program.

Let me hasten to point out that much good is being done and accomplished every day by the Federal Aviation Administration and the Federal Government. AOCI endorses the current FAA security-related research and development program, and we urge this subcommittee to give its full support to those efforts.

The FAA is encouraged to continue their R&D work to emphasize thermal neutron analysis devices as well as vapor detection equipment. As has been said, both of these have great promise.

AOCI would also like to compliment the FAA for commissioning work at Baltimore-Washington International Airport to find areas where security can be improved and enhanced beyond current levels. This underscores our point, made earlier, that pilot programs are effective in developing procedural and equipment improvements to reduce security risks, without the expenditure of large sums of money.

Only the Federal Government can provide the leadership and funding needed for effective aviation security. AOCI firmly believes that the nature of today's threat requires a much greater role for the Federal Government in aviation security. The U.S. Government must accelerate efforts to strengthen international agreements and establish strong security standards for all nations of the world, along with sanctions against those governments that fail to live up to international standards.

Along this line, the aviation community as a whole applauds Secretary Skinner for his very positive action in reviewing the security plans of all foreign airlines.

In conclusion, Mr. Chairman, the Federal Government must define and continually redefine the nature of the threat to aviation. They must consult with and assist the airports and the airlines in implementing new and better security systems to address the ever-changing threat. We must get on with the full assessment of current and future risks and make decisions today as to where our limited resources can be most effectively deployed.

Mr. Chairman, I stand ready to respond to any questions that you or your committee may have.

Mr. **Oberstar**. Thank you very much.

Do any of the other witnesses have prepared statements, text, or remarks to make? I don't want to overlook anyone or have anyone misunderstand the invitation that was issued earlier.

[No response.]

Mr. **Oberstar**. I would like to repeat a caution I stated earlier. And Mr. Lally, on behalf of ATA I would like you to submit the amounts spent by carriers on security, and to present that information both as dollar amounts and as percent of operating expenses.

I would like to have that information on behalf of airports from Mr. Fitzgerald and Mr. Jackson.

[Information, when received will be retained in subcommittee file.]

Mr. **Oberstar**. Clearly, the dollar amounts that you are referring to, both in the procurement of new detection devices and in providing security at airports, are very sizable amounts of money. And I fully agree they ought to be coming out of the Aviation Trust Fund; after all, a portion of the ticket tax was originally dedicated to security and was included as a separate item in subsequent years. After that initial designation, it was folded in as a single tax, but it was intended by Congress at the outset—and fully concurred in by the airlines and the traveling public—that there should be a certain amount of that tax set aside for security purposes. Now that money is being tied up in the Trust Fund, which is being held in reserve for other purposes, principally, along with the Highway Trust Fund and the Social Security Trust Fund, to cover up a certain amount of deficit.

This Member, and I think all Members on this committee, feel very strongly that the Aviation Trust Fund should be freed to do the purpose for which it was intended, and that is to provide for the facilities and equipment needed for safety and security at our airports and our airlines.

So we will continue to work in that direction, but I think we need some help from the public to make it clear to this Administration, as we tried with the previous Administration, to set free the Trust Fund. You can help immensely in that regard. As I said, we fell short by five votes on the House floor of passing the amendment offered by Mr. Mineta. I think we need to continue that effort in this Congress, and we will do so at the first opportunity to count 218 votes. That's one more than the half that we need to pass it.

The access issue that you have discussed, those are big numbers—$18,000 per door for 1,500 doors at JFK, 750 at LaGuardia, and 1,000 doors at Newark, plus all the other airports in this country—that adds up to a very big ticket.

Now, I'm sure you responded to the FAA's Notice of Proposed Rulemaking when it was issued last September. What response did you get from the FAA when you questioned those numbers and proposed a test initiative?

Mr. FITZGERALD. I think there has always been some dispute on the numbers. When FAA estimates that the average access doors are 128 and we wound up with 1,500, you obviously are viewing the problem from such different perspectives.

Mr. OBERSTAR. Are you saying that the FAA based its rulemaking on a grossly smaller number of doors?

Mr. FITZGERALD. I think that they just miscalculated the number of doors that they felt would have to be included in any kind of a program. When we went out and actually investigated the airports, we found many, many more doors.

I think there was a dispute right from the beginning on the physical problems that we would all be facing, and I think Mr. Jackson's testimony summarized the fact that all of the aviation groups were together in their position that this rule should not go forward as it was originally proposed because we needed time to measure the implications and to see where the differences really were in our two positions.

Mr. OBERSTAR. I think my colleagues from New York would want to pursue further the matter of counting doors. But it is a matter of concern, because this very same issue is one that was identified by the Federal Aviation Administration in its international survey of foreign airports as a point of security lapse, and a recommendation was made by the FAA and the Department of Transportation to the other participants in the ICAO conference that more security be provided for doors in the airports. If that isn't being done, then you have a number of people who can obtain access to what should be secured positions or points in the air operations area.

Mr. FITZGERALD. I think that same problem would exist overseas if they used the same criteria, so I think you are absolutely correct in the difficulties involved in trying to secure the doors.

Mr. OBERSTAR. Yes, but the foreign operators don't seem to consider the threat as serious a matter—that is, controlled access doors—as the United States does.

Mr. FITZGERALD. Well, I would have to consider the security today generally to be adequate, but it can be improved. I think where you have a major airport, like Kennedy International Airport, we certainly are committed to doing that. I think when you start viewing the entire country, however, and 270 airports, you do a disservice by treating them all the same way without somehow trying to understand the level of the threat at the various levels of airports.

Mr. OBERSTAR. Certainly, at maximum safety the threat of terrorism can literally shut down all American airports. Even if you tried to restrain yourself to do only those steps that prevent the obvious, you could so hamstring American airports that they would not be operative. I can understand that, so again we are looking at balance.

Haven't airport operators and the airlines been able to agree with the FAA on which are critical access doors and which ones are not?

Mr. FITZGERALD. I would say no.

Mr. OBERSTAR. Is there no standardized approach to this?

Mr. FITZGERALD. We have been talking about this rule for some time, and I don't think we've really made a lot of progress in terms of trying to get at all of the definitions and what is meant. Even now, with the rule having been issued, we have so many questions on definitions that would impact on the number of doors to be covered that it is still very, very confusing, and that's what concerns us. We certainly are committed to the idea of improving access doors, but we are troubled by the extent of this rule.

Mr. **Oberstar**. Of course, it was not the question of a door in the case of PanAm.

Mr. **Fitzgerald**. Not at all.

Mr. **Oberstar**. It was a legitimate, open point of entry through the ordinary conduct of business, putting baggage and passengers on board the aircraft, that was the conduit for that destructive device. And apparently that was so in other cases as well. But you do have—and I will conclude, as I am exhausting my time, which I want to reserve for others as well—you do have some 47,000 persons who work on the airport premises. That's a massive undertaking. That's more than some cities, the people who just work there who have access and who need security clearance to access that airport.

Mr. **Fitzgerald**. And who need the opportunity to be productive. Every time you put a barrier in their way you must pay a price, not only in the capital investment but in lost productivity of people being unable to reach their work locations. That concerns us greatly.

Mr. **Oberstar**. I have seen some very, very secure systems, such as computer reservation systems of certain airlines, where the security is extraordinary. There are numerous kinds—fingerprints, weight identification, eye retina scanning systems. There are at least three or four steps that must be pursued before one person can gain access. That's the ultimate in security. At that rate, we would probably have 15 people a day getting into an airport.

Short of that kind of security at its extreme, for a very legitimate purpose and needed—and, of course, there aren't as many people who need access under those conditions to a secure place—how do you prevent a mechanic, for example, bringing a mechanic's tool box onto the premises that might not have tools but instead might have plastic explosives that can be placed on board an aircraft?

Mr. **Fitzgerald**. I would say that threat that has never been an area which we were concerned about. That doesn't mean that we might not be concerned about it in the future, but both in the background checks that we do now on airport and airline employees, the kind of supervision that is provided in aeronautical areas, the kind of airlines security systems that they have in place, I feel comfortable that we are doing enough already to keep the likelihood of that at such a small amount that I really feel we need to devote our resources into other areas where there is a much greater threat.

Mr. **Oberstar**. I thank you. My time has expired.

The Chair recognizes the gentleman from New York, Mr. Molinari.

Mr. **Molinari**. Thank you, Mr. Chairman.

I think some very good points have been made by this panel in questioning the feasibility of the rule. These are intriguing questions, listening to those of you who are experts and run airports.

I would like to ask this question. With limited resources, what do you recommend as an alternative which would be a better use of money than these computerized access card systems?

Mr. **Jackson**. I'd like to address that if I may, sir.

Mr. **Molinari**. Please, Mr. Jackson.

Mr. **Jackson**. We are not saying that the computerized card access system is not a good use for the security aspect of an airport. My airport has had it since 1972. It is an outstanding management tool, but it is very different for every airport. We are all built different. It's just like no two people look exactly alike; no two airports are built alike.

Mr. **Molinari**. Okay. Excuse me if I interrupt. So you're saying that at your airport it is functional, is reasonable, and should be implemented, but not for other airports.

My question then is to the other airports where they wouldn't have the same physical makeup. What would be a better alternative?

Mr. **Jackson**. There are a number of systems in use throughout the country. Some do have card access. Some just have identification badges which must be shown to an individual before they pass through a gate going onto the airside. Some must be funneled through their company operations and use their cards to punch in on a time clock. There are many different methods used to keep individuals out who are not supposed to be in, and to make sure that those people who work inside the AOA are permitted access to that area.

A card access system is just an automated system to do that same sort of thing.

Mr. **Molinari**. I guess I would like to pick up where the Chairman left off. I think his question was, is it your impression that when the FAA proposed this rule they weren't aware of the fact that there are as many access doors at some of the airports that we in fact have?

Mr. **Jackson**. Absolutely. They have no conception of the number of doors, or the problems which you may have with certain doors which also have to be fire-life safety doors. They must be openable from the inside but not from the outside. They must be alarmed. The physical cost of $18,000 per door includes all of these costs, plus a base to take care of the major computer that runs the whole system.

As I mentioned, each airport is built differently and the number of doors with access to the AOA is entirely different and must be considered, and was not.

Mr. **Molinari**. Let me turn to New York if I may, Mr. Fitzgerald.

We heard it was 1,500 at Kennedy, 1,000 at Newark, and 750 at LaGuardia. During the hearing process have you brought these figures out? Did you testify at the hearing, or someone on your behalf?

Mr. **Fitzgerald**. I did not personally testify, but all of these figures were brought out.

Mr. MOLINARI. Have you sat down with the FAA officials to discuss the unique problems that——

Mr. FITZGERALD. Many times. But I think that perhaps they may have been influenced by international events requiring some kind of reaction, and I think there is probably agreement among airport operators that in fact you do need an access system, that in fact it is not a bad thing to have. I think the level of sophistication and the application of technology that they are proposing has different impacts on different airports.

Mr. MOLINARI. All right, then we get back to the question I asked previously. What do you recommend?

Mr. FITZGERALD. I would recommend that we go with our pilot program and, based on the four airports that are selected—you could select large airports and small airports, and I think that you could develop a system such that at the end of the test period it would have application to all 279 airports. And then, I think, you would be able to make a sensible recommendation on commitment of resources for all of the airports. Right now I just think we're moving too quickly and not knowing exactly where we are going.

Mr. MOLINARI. But it's possible, if you put in this pilot program that you suggest, that after a test maybe it would make sense to adopt this program that is not the subject of the rulemaking?

Mr. FITZGERALD. It might make sense, but I think that if we had some more time we would at least answer some questions on technology. Right now we're not even sure of the proper technology to use to implement the various requirements of the rule.

So I really think it's a question of time and it's a question of trying really to adapt the system to meet the needs of the various types of airports across the United States, and then we can all commit with a sense that we're not wasting money, that a few years from now we might have to go back in and change all over again.

Mr. LALLY. If I could add to that——

Mr. MOLINARI. Yes, Mr. Lally, go ahead.

Mr. LALLY. From the standpoint of the airlines, the airlines share the concerns of the airport operators with respect to this rule, even though the rule is directed to the airport operators and not the airlines. The airlines did join with the rest of the aviation community in petitioning FAA and DOT for an approach different from the one that has taken place, namely, the pilot project.

One of the principal concerns of the airlines in addition to the cost and the operational impacts is that there is no provision stated by the Federal Government for compatibility, compatibility among airports and compatibility between airports and tenant organizations.

Now, we have a system requirement in place now that impacts every airport that comprises the National Air Transportation System, 269 airports, every airport served by a scheduled air carrier. When we undertake an impact like that without considering the desirability or lack of desirability or degree of compatibility expected, then I think we're moving a little bit too fast. I think the issue of compatibility, so that we don't have a totally fragmented National Air Transportation System when it comes to access controls, is a real danger here.

So we agree that there needs to be further study, and the airlines are willing to participate in that study effort.

Mr. **Molinari**. That's interesting. Do you think there may be a reason for not wanting compatibility throughout the system? In other words, if somebody has an access card and they are free to use it anywhere in the country, is that desirable?

Mr. **Lally**. No, I don't think that's the reason. I have not heard that stated as a reason for not treating compatibility.

The problem that the airlines face, to take an extreme example, is that an airline flight crew may serve 12 airports in one day and may end up having to have 12 different types of access control cards to serve those airports, to arrive and depart. With the program going the way it is, directed to 269 airports without some guidance as to compatibility, that risk exists. Advice as to compatibility would seem to us to minimize that risk and provide for some degree of consistency.

Mr. **Molinari**. I guess what the panel is saying is that collectively you believe there is an overreaction on the part of the FAA to whatever problem is out there today. Is that a fair statement?

I see most of you nodding yes.

Mr. **Kolter**. Would the gentleman yield on that point?

Mr. **Molinari**. I'd be glad to yield.

Mr. **Kolter**. I listened intently to your most interesting testimony relative to lack of uniformity, and I can understand that. Now we're talking about compatibility, which is something totally different. Yet you say that if you had a pilot program for a given period of time over four airports, that uniformity and compatibility could be worked out. Is that what you're trying to say?

Mr. **Fitzgerald**. I would say that I think we would better understand the issues, because I don't think today that we understand them in light of the technology that is available to manage those issues. At the end of the pilot program we could very well face the same problem we face now, but I don't really believe that. I think we need to find a technology that will answer everyone's questions. We don't have that answer today.

I think the danger exists that we could select a system in response to this rule, and a year from now find out that we committed the resources to buy a computer system that doesn't have the ability to meet these other issues that will come up to us in the future. That's the concern.

Mr. **Kolter**. So you think that perhaps somewhere in the future we can conclude that there will be something invented, something that we could use, which could be an answer to our problem here? You know what the problem is here and now. I don't see what further study would do. The problem is here. I can't see further study. I don't understand what you're trying to do here.

Mr. **Fitzgerald**. I think it's a matter of having compatibility as only one single issue, and I think there are so many issues that relate to how areas on the airport—for instance, a cargo area—are supposed to be controlled. That is really undefined today. How is a general aviation area—many of the airports in this country today have a majority of general aviation flights—supposed to be managed? When you have an airport with 500 members of a flying club who come in to use the facilities on weekends, should the airport operator have to issue all of these people airport access control cards?

We really don't have answers to all of these questions that we have been raising. And when you get those answers, then you can select a technology that would help you to deal fairly with all of those.

Mr. **Kolter**. You're talking about the larger airports. Would the smaller airports have their own distinctively different problems?

Mr. **Fitzgerald**. They will have them, and they do have distinctively different problems, but they're all being covered by the same rule.

Mr. **Kolter**. Thank you.

Mr. **Molinari**. I just want to carry this one step further, if I could.

What I perceive from the testimony we've heard so far is that there would be huge costs incurred on the part of our carriers—I'm talking about domestic carriers—in this country. There apparently is no counterpart to this program in foreign countries.

The question I would have, then, is whether this would create an economic disadvantage to our carriers in this competitive market that they're engaged in.

Mr. **Lally**. I think the obvious answer is yes. There would be higher costs.

I believe that the airlines and the airport operators and the others who have testified all agree that there is a new and different and dangerous threat that exists today, and that threat is international sabotage by terrorists. The focus of that threat is overseas, and it requires Federal assistance in the person of FAA inspectors and money for equipment to detect bombs. That is the first and foremost threat today.

So I would say that if we were to put things in order of priority, that the money that would be required for this access control system would be better spent in responding to the highest priority threat. I think that going at this is a bit of an overreaction to a one-time event, as Mr. Fitzgerald indicated, the likelihood of the recurrence of which is extremely remote. There are very serious problems facing the industry today that require that kind of effort and response.

Mr. **Molinari**. Thank you very much. I appreciate your testimony.

I have no further questions, Mr. Chairman.

Mr. **Oberstar**. The gentleman from Pennsylvania, Mr. Kolter.

Mr. **Kolter**. Thank you, Mr. Chairman.

You know, Mr. Chairman, in the years I have been here I don't ever recall having such total agreement with a panel as I have with this panel today.

The one question I have, and it's only going to be one question, is this. You suggest that perhaps the FAA ought to assign more of its people to the high-risk airports overseas in an expanded role. My question, then, is that if we at the Government level expand our role, what will the airline companies and the other governments do in an expanded role to promote safety? What should they do that they're not doing now?

Mr. LALLY. I think on an international basis that worldwide we have to look to ICAO, which in effect is the only regulatory-type body that deals with worldwide aviation.

When it gets closer to home we can look at our Government, the United States Government, establishing requirements for all airlines; not only U.S. airlines, but for foreign carriers that serve the United States that present the same level of risk. Those requirements ought to be uniform so that certain citizens are not denied the protection of the higher levels of security.

But overseas, when we are talking about our Government reacting and providing additional presence, we think that's very important in response to today's threat. I tried to define earlier that we don't mean that the FAA assumes the airlines' responsibilities; not by any means, but that the Federal assistance there would be of great help. I would liken it to the fact that the FAA folks would be there more as a player-coach, observing and assisting and directing and coordinating, orchestrating the security; not there in the role of a traffic cop for compliance or audit purposes, but there to work shoulder-to-shoulder and in the trenches, so to speak, with the airlines in making sure that there is security.

Mr. KOLTER. Mr. Lally, it has been stated that some of the nations overseas are not adequate in providing some support for what we're trying to do here.

Would you think we ought to consider having our airlines pull out of these countries if in fact those governments fail to give us assistance on this matter?

Mr. LALLY. I think that's a last resort. I think it's a remote and very last resort because our objective is to protect an efficient and secure and safe air transportation system worldwide. What we don't want to do is destroy the system. I think that we would look toward the authority that we think ought to be invested in ICAO as an added authority, and that would be that ICAO would have the resources and the authority to evaluate the performance of member states in how well they implement those international standards, how effective those standards are in the first place, and then most importantly, give ICAO the authority to do something about states that do not implement them properly.

Mr. KOLTER. Well, what could they do? If we're not going to pull out, what else could they do?

Mr. LALLY. Well, ICAO could be given sanction authority. Now, that is an unpleasant term in the international community. That would mean that ICAO could impose some sort of legal sanctions upon nations that failed to comply with the ICAO's standards and recommended practices.

But short of actual sanction and penalty, the mere threat or possibility of ICAO somehow publicizing or noting the deficiencies on the part of member states would in itself be a great incentive for states to achieve a proper level of compliance.

Mr. KOLTER. Thank you.

Mr. OBERSTAR. The gentleman from New York, Mr. Boehlert.

Mr. BOEHLERT. Thank you, Mr. Chairman.

Am I correct in understanding that you are estimating this whole system, if we proceed with the access control system as proposed, assuming that cool heads would prevail and you could work out differences, it would cost about $900 million to cover the major airports in the United States?

Mr. JACKSON. That's a correct figure, sir.

Mr. BOEHLERT. All right.

Mr. Fitzgerald, could you estimate for me the cost of having thermal neutron analysis systems in all of our airports in the country?

Mr. FITZGERALD. We've estimated that you're talking about $1 million for one device. I think someone testified at this morning's session on what the cost would be across the United States. I'm not sure I'm the best person to give you that estimate.

Mr. BOEHLERT. A ball park figure?

Mr. FITZGERALD. You're probably talking—as I recall, I think $66 million was mentioned this morning. I could be mistaken.

Mr. BOEHLERT. And that would cover all the airports in terms of screening the baggage?

Mr. FITZGERALD. There were airports that were viewed as major threats——

Mr. OBERSTAR. If the gentleman would yield, the figures given were for 66 TNA units and 171 vapor detection analysis units at a total estimated cost of $66 million.

Mr. BOEHLERT. For both the TNAs and the vapor detectors?

Mr. OBERSTAR. The estimate was that you would not require those very sophisticated devices in all places, so the $66 million was a combination of both the vapor detectors and the TNA units.

Mr. BOEHLERT. Mr. Lally?

Mr. LALLY. I would like to add to that. That estimate was a preliminary Air Transport Association estimate, and applies only to the 45 high-threat airports in Europe, the Middle East, and the Far East. That's a combination of vapor detector equipment and TNA equipment to satisfy the requirements of eight airlines at those airports.

Now, if you wanted to project that cost to U.S. airports, and we just talked about 269 airports in the United States, to equip each of those airports with one TNA runs close to $1 million an airport. So there you have 269 airports. At most U.S. airports you would need many of those units to satisfy the requirements of all airlines.

So the number to equip all U.S. airports would be a very, very substantial number.

Mr. BOEHLERT. A billion dollars?

Mr. LALLY. Probably a minimum of a billion dollars.

Mr. BOEHLERT. All right.

Now, if we had the vapor detectors at all these airports and we had TNA systems at all these airports, and we had an access control system that satisfied you and the FAA, would you then feel a lot more comfortable about our security system?

Mr. LALLY. Yes, but——

Mr. BOEHLERT. Here's what I'm getting at, Mr. Lally. If you total up all these numbers you are talking about a couple of billion dollars. That's real money, I understand, but we've got $5.5 billion sitting idle, unobligated, in the Trust Fund.

For the life of me I just can't understand how we can hoodwink the American people. We tell them that there's 8 percent tax on every ticket and that this money is going to be dedicated to improving the aviation system and security, and they don't mind paying it because that's a worthy objective; and yet, it is sitting idle.

Mr. **Lally**. But I think we need to respond to the threat. I don't agree, and the airlines don't agree, and I don't think others agree, that we have the same level of threat domestically that we have overseas.

Mr. **Boehlert**. I understand.

Mr. **Lally**. So we ought to go on the basis of threat. There are airports in this country of the 269 that have been following these security requirements, airlines and airports, for 15 years, and there are probably some airports where they not only never had a hijacking or an act of sabotage, but they probably have never found a gun.

So we have a lot of places in this country where the threat is not nearly as severe as other places, so I think our security measures ought to be tailored to respond to the threat, the security needs of each airport, and not try to cover——

Mr. **Boehlert**. Then you're just lowering the cost. That is even more comforting. We would not have to spend $2 billion; we could only spend $1 billion or $1.5 billion. But we've got it, that's the point.

I don't see——

Mr. **Lally**. I'm all for accessing the Trust Fund.

Mr. **Boehlert**. I don't see why you're not more effective in helping us, all of you collectively.

Let me tell you, we came up with a crazy scheme a while back, a little matter called interest on dividends and interest. In my first year here we in Congress tried to figure out some way to get more money into the Treasury that was due to the Treasury, and we discovered that a lot of people across the country are less than honest when they fill out their Form 1040. They forget to report interest or dividends. So someone came up with the idea, and we thought it was a pretty good idea, to have an automatic deduction from interest and dividends. Nobody is paying one penny more in taxes; it's just guaranteeing that the U.S. Government is going to get it.

Well, let me tell you that the banking community across America mobilized 240 million American people. We had more mail on that subject than we had had on any subject since the war in Vietnam. Consequently, present company excepted, Congress caved in and repealed it. It was a dumb thing to do, but that's another story for another day. We have this monumental deficit.

Why can't you collectively get cards and letters and petitions in airports and get people across America to convince those not on this committee—we are already convinced; we are believers—that we have billions of dollars sitting idle in a trust fund that should be used to prevent future PanAm 103s?

Mr. **Lally**. Message received. We will take it back.

Mr. **Boehlert**. Please do, because you've got a lot of talent and you are very able people and we want all the support we can get. Thank you very much.

Thank you, Mr. Chairman.

Mr. **Oberstar**. I thank the gentleman. He has made a very sensible suggestion.

The gentleman from Texas, Mr. Laughlin?

Mr. **Laughlin**. I have no questions, thank you, Mr. Chairman.

Mr. **Oberstar**. The gentleman from Iowa, Mr. Lightfoot?

Mr. **Lightfoot**. Thank you, Mr. Chairman.

I echo Mr. Boehlert's suggestion as well because we really do need some help up here on this issue. As has been mentioned several times today, we came within five votes, and it would look like we could certainly get that help out there.

Very briefly I would like to touch on a bit of a peripheral area in this whole debate, and that is the question of access of general aviation to major airports and so on. I agree that the emphasis needs to be applied where the threat exists, but back in a former life I was on a police department once upon a time and the way you catch a crook is to think like one. If you think like a terrorist, it gets kind of spooky.

Also, being a general aviation pilot and having once been involved in a charter business and so on, I have worked that side of it. We are seeing, particularly in fields like you gentlemen represent, a very distinct separation between commercial traffic and general aviation traffic. In some cases it has been due to traffic flows; in other cases—well, as an example, at one airport that we use it used to be that there was a gate where we could bring passengers in who were going to connect with a commercial flight; we could drop them there. After some construction, general aviation was moved clear to the other side of the airport. Now if the gas boy is busy, it's a $6 cab ride to get your passengers over to the commercial airliner.

We all realize that we have to cooperate and work together on these things, but first of all, do you consider that as a potential avenue for someone to encroach on your security system? If so, maybe we could pursue that a little further.

Mr. **Jackson**. We at our airport do not consider that to be a big threat. By design, our general aviation facility is removed from the commercial aviation. I made the decision some time ago that our security line will extend only around the area where our commercial air carriers are operating. The air cargo area—although we do have card readers with our system out there and we do check people to ensure that they have the proper identification when they are in that area, that is not the area where we concentrate our efforts. We concentrate our efforts around the air carrier aircraft.

General aviation, in our particular case, has its own runway and it is generally separated by a good mile from the rest of the airport. We have occasion where a general aviation aircraft piloted by a mechanic, as an example, will come in at night to work on an airplane. He parks in the general aviation area, unless we know by tail number and the time of arrival that that aircraft is bringing that mechanic in. And only then will we let him come up to the commercial aviation area. So, by design, I think many, many airports do the same. They keep the general aviation over in one area separate from the rest of the airport and they concentrate their primary security efforts around the commercial carrying aircraft.

Mr. **Lightfoot**. Yes, Mr. Lally.

Mr. **Lally**. I think the airlines agree with that estimate of the threat as being rather remote from that source. But there is a requirement that the airlines screen all passengers that board their aircraft at these airports. So that if the charter operator comes in and is able to dump his passengers into a sterile area, they become unscreened passengers, and that's a violation of the requirement.

Mr. **Lightfoot.** Right.

Mr. **Lally.** So that under FAA rules, the charter operator has two choices. One, he can screen his passengers at the point of enplanement, and then therefore have access to the sterile area, or they can screen their passengers upon arrival. And in that case they have to go out and come back in through the screening area. So aside from the threat involved, there is a processing problem, a logistical problem, of making sure all of the passengers that board the scheduled airlines are properly screened.

Mr. **Lightfoot.** Your assessment earlier that every airport is different is certainly true. And it's probably a plus in terms of security, because if someone's going to break the security, they have to learn the system at that particular field.

I guess my basic concern is that those of us involved in general aviation certainly do our part in screening of passengers and so on. I've worked off a field where we did have a card that work in the gate, and it was our responsibility to see that the passenger was A-OK to go on to the commercial airliner. That puts a little weight on your mind, too. Although, usually in that kind of a situation, working out of a small community, you probably know the people that you're carrying anyway, and they're probably a third or a fourth cousin, in some of the towns that I've live in, or have lived in, but they all tend to be related. But I guess that as we put this together and look at ways to reinforce the security at major airports where we still do have general aviation traffic, and particularly airports that originate international flights, like DFW, and Kansas City, and O'Hare, and so on, that it comes down to that thing that was discussed earlier, where's the trade-off between inconvenience and safety. And of course, safety has to be, I think, the number one issue. But we need to be prudent, I think, in our judgments in those areas.

And of course, any suggestions you gentlemen have would be certainly welcome by this committee because that's what we're here for. We appreciate you coming.

Thank you, Mr. Chairman.

Mr. **Oberstar.** Thank you very much. And we really appreciate the gentleman's interest. And he's one that is very familiar with aviation, and we welcome his participation in the committee's deliberations.

I have just a couple of concluding questions. One is the issue of interlining, which was raised earlier and with other witnesses. That is a matter that provides some serious security problems for airports, passengers moving from one line from one airport that is unsecured to a secured airport, and whether adequate precautions are taken to assure that passengers are screened. Do you feel that there is sufficient security provided to accommodate, or to account for, the interlining issue?

Mr. **Jackson.** Mr. Chairman, as far as the passengers are concerned, I think most airport operators are in concert. We ensure that the aircraft bringing a passenger in, if there's any question in our mind as to the quality of his screening, then we force that aircraft to a spot other than into a cleared area. He must go to the general aviation area and have his passengers transported around the airfield and put in on the non-sterile side, thereby having to be screened before they go aboard a commercial aircraft. There are others areas which have a small field, with only one or two flights a day, but they do have adequate screening devices and they are screening all passengers, and those people, then, would be permitted to come into a commuter area wherein the individual would be offloaded into a sterile area and be permitted to go aboard another air carrier.

Mr. OBERSTAR. Now those are, I think, very prudent and responsible steps taken at domestic airports. It's a bigger problem with foreign airports, is it not? The security provided, as you've outlined, is not always in place in foreign airports with the interlining issue.

Mr. LALLY. That's correct, Mr. Chairman. I think the airlines have a lot of confidence in the domestic system, in terms of interlining within the United States. Overseas the interlining aspect of the system has received attention by a number of authorities, including ICAO, and there is concern about security in transit lounges at airports overseas. And FAA pays a lot of attention to that, and gives airlines advice as to that problem, and how to react to it.

And there have been times when the, my recollection is that certain airlines were identified, or certain routes were identified as perhaps lacking in the adequate security, and preventative measures were established at certain locations.

I think maybe we could discuss more of that in perhaps the executive session.

Mr. OBERSTAR. Thank you very much. We will pursue that—

Mr. BOEHLERT. Mr. Chairman?

Mr. OBERSTAR. The gentleman from New York, yes.

Mr. BOEHLERT. Mr. Jackson was very specific in saying that the airports are doing a good job with passengers. And I've found that to be the case. I fly into a very small airport in my home community, and I've noticed that they're quite diligent in checking me out as—maybe they should be with me—coming in and out. [Laughter.]

But I'm wondering about baggage. Am I correct, and I hope I'm not, that most baggage checked in most airports in America is not checked, is not checked for security purposes?

Mr. JACKSON. Well, a person arriving with baggage on a general aviation airplane, would be required to take his bag from the general aviation side around and check it in——

Mr. BOEHLERT. Commercial aviation, Mr. Jackson. Typical, this morning I checked in my airport, and got my tickets for my checked baggage, and that was taken out to the airplane. I don't think anyone checks that at all. They check me thoroughly when I go through with my hand carry stuff. But what about the majority of baggage that's brought to the majority of airports, is that checked at all? And if not, shouldn't it be?

Mr. LALLY. Since 1972, FAA has required airlines to have FAA approved security programs. And in those programs there are security measures that relate to checked baggage. And those measures were enhanced a few years ago following an explosion at La Guardia Airport in 1975. And so, at the present time there are security procedures relating to checked baggage, and they may extend to actual inspection of that baggage by x-ray or by physical inspection if the circumstances surrounding the transaction, the airline's acceptance of the bags, so indicates.

Mr. **Boehlert**. They may. That's permissive. But as a practical matter, and everybody's there at the last minute—I think employees of airlines have the highest stressed jobs in the world. Everybody's there and you've got to catch that plane, here's my luggage, they give you the ticket, they throw it on a cart, and it goes out to the plane, and I would venture an opinion that the overwhelming majority of that baggage is not checked by anyone.

Mr. **Lally**. Well, I guess what—it is not—the overwhelming majority of it is not physically inspected. But there are screening procedures that relate to all bags. And those screening procedures can result in the physical inspection or x-ray inspection of the bags.

But you're right, as a system-wide requirement, there is generally actual inspection, physical inspection of individual bags is not done.

Mr. **Boehlert**. Do you think it's necessary, or do you think the risk factor is not such that it justifies a more extensive inspection program?

Mr. **Lally**. No, I'm confident with the measures that are in place today, domestically. I don't think that's the same overseas. I think we need this equipment to inspect.

Mr. **Boehlert**. Sure, I understand what you're saying.

Mr. **Lally**. But the threat, domestically, is not the same and the screening criteria that I mentioned went into effect in 1976, has never detected a bomb. That's because there haven't been any bombs. What it has detected is evidence of illegal activity. Contraband was detected. Guns were detected. Currency was detected. Drugs were detected. So it gives us some confidence in the adequacy of the criteria that are in place as being sufficient to identify criminal transactions. And I don't think the threat of sabotage is severe in this country, and I hope it stays that way, of course.

Mr. **Boehlert**. Thank you very much.

Mr. **Oberstar**. I want to thank the members of the panel for your very thorough responses to questions, and for your genuine concern about security, and for the actions that you and your member participants, airports and airlines alike, have given to the issue of security. These are matters of vital interest to all Americans, and matters that we shall continue to pursue. And we will delve further in the Executive Session.

Mr. **Lally**. Thank you, sir.

Mr. **Lightfoot**. Mr. Chairman, could I have one final parting shot, here.

Mr. **Oberstar**. Yes.

Mr. **Lightfoot**. Following up on Mr. Boehlert's suggestion about helping us with the Aviation Trust Fund, the idea just occurred to me that if you fellows could use your many resources to convince the American people that if the trust fund stays tied up as it is, we're all going to get a 51 percent raise, I think we'd get it out in a hurry. [Laughter.]

**Mr. Oberstar.** Thank you very much.

[The prepared statements of Mr. Lally, Mr. Jackson and Mr. Fitzgerald follow:]

# STATEMENT OF RICHARD F. LALLY
# CONCERNING AVIATION SECURITY

BEFORE THE SUBCOMMITTEE ON AVIATION OF THE
HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE
U.S. HOUSE OF REPRESENTATIVES
MARCH 21, 1989

# STATEMENT OF RICHARD F. LALLY
# CONCERNING AVIATION SECURITY
# BEFORE THE SUBCOMMITTEE ON
# TRANSPORTATION AND
# RELATED AGENCIES OF THE SENATE
# APPROPRIATIONS COMMITTEE

U.S. SENATE

MARCH 14, 1989

GOOD MORNING. MY NAME IS RICHARD F. LALLY, I AM ASSISTANT VICE PRESIDENT FOR SECURITY OF THE AIR TRANSPORT ASSOCIATION OF AMERICA. I WISH THAT MY APPEARANCE BEFORE THE SUBCOMMITTEE WERE UNDER MORE PLEASANT CIRCUMSTANCES -- FOLLOWING A LENGTHY PERIOD OF UNINTERRUPTED SAFE, SECURE, COMMERCIAL AIR TRAVEL RATHER THAN THE TRAGEDY WE HAD ABOVE SCOTLAND IN DECEMBER. I WELCOME THIS OPPORTUNITY, HOWEVER, TO DISCUSS WITH THE SUBCOMMITTEE THE CRITICAL NEED TO EXPEND MORE EFFORT IN RESPONDING TO THREATS OF SABOTAGE AGAINST INTERNATIONAL CIVIL AVIATION.

THE EXPLOSION ABOARD PAN AM FLIGHT 103 WAS A PAINFUL REMINDER OF THE VULNERABILITY OF A FREE SOCIETY TO TERRORIST ATTACKS. THE U.S. AIRLINES WITH SERVICE OVERSEAS HAVE HAD EXTRAORDINARY SECURITY MEASURES IN EFFECT FOR THE PAST THREE YEARS AT 45 HIGH RISK AIRPORTS, MOST OF WHICH ARE LOCATED IN EUROPE AND THE MIDDLE EAST. YET, DESPITE THOSE EFFORTS, SOMEONE, OR SOME GROUP, SUCCEEDED IN SABOTAGING FLIGHT 103 AND TRAGICALLY ENDING THE LIVES OF 270 PEOPLE.

WE HAVE REDOUBLED OUR EFFORTS IN THE WAKE OF THAT CRASH, INSTITUTING EVEN TIGHTER SCREENING PROCEDURES FOR INTERNATIONAL FLIGHTS THAN WE HAD BEFORE THE CRASH. BUT THE SECURITY CHALLENGE WE FACE TODAY IS FORMIDABLE, AND THE AIRLINES CANNOT MEET THAT CHALLENGE ALONE. THEY ARE COMMERCIAL ENTERPRISES, NOT INTELLIGENCE AGENCIES. THEY RELY ON THEIR GOVERNMMENT, AND

ALLIED GOVERNMENTS, TO HELP TRACK AND ASSESS THE MANY SECURITY THREATS MADE AGAINST COMMERCIAL AIRLINES EACH YEAR. AND THEY VERY MUCH NEED GOVERNMENT'S HELP, INCLUDING THE DIRECT ASSISTANCE OF FEDERAL AVIATION ADMINISTRATION SECURITY PROFESSIONALS, TO PROVIDE ADEQUATE SECURITY IN HIGH RISK AREAS OF THE WORLD.

THE NATURE OF THE SECURITY THREAT WE FACE TODAY IS FAR DIFFERENT (AND FAR MORE DANGEROUS) FROM WHAT IT WAS IN THE EARLY SEVENTIES WHEN WE FIRST BEGAN SCREENING PASSENGERS AND THEIR CARRY-ON BAGGAGE. BACK THEN, HIJACKING WAS THE PRIMARY THREAT. NOW IT IS SABOTAGE BY INTERNATIONAL TERRORISTS SEEKING TO INFLUENCE THE BEHAVIOR OF GOVERNMENTS THROUGH ACTS OF VIOLENCE AGAINST COMMERCIAL AVIATION. MODIFICATION OF GOVERNMENT POLICY IS THEIR REAL GOAL, COMMERCIAL AVIATION MERELY THE SURROGATE TARGET.

MEETING THIS NEW THREAT BOTH WARRANTS AND REQUIRES GREATER GOVERNMENT INVOLVEMENT IN AIRLINE SECURITY. THE U.S. GOVERNMENT MUST GO BEYOND ITS TRADITIONAL REGULATORY ROLE AND BECOME AN ACTIVE PARTNER OF THE AIRLINES IN SECURITY.

I HAVE FOUR SPECIFIC RECOMMENDATIONS TO OFFER HERE TODAY. IN MAKING THESE RECOMMENDATIONS, I DO NOT MEAN TO SUGGEST IT IS SOLELY THE GOVERNMENT'S RESPONSIBILITY TO IMPROVE SECURITY. THE AIRLINES MUST DO THEIR PART AND I ASSURE YOU THEY WILL.

MY FIRST RECOMMENDATION IS THAT THE FAA SHOULD CONCENTRATE ITS OWN SECURITY RESOURCES WHERE THEY ARE NEEDED MOST. CONGRESS SUBSTANTIALLY INCREASED FAA'S BUDGET FOR SECURITY FOLLOWING THE TERRORIST HIJACKING OF A TWA JETLINER IN THE MEDITERRANEAN THREE AND A HALF YEARS AGO. FAA SUBSEQUENTLY HIRED MORE AIR MARSHALS AND SECURITY INSPECTORS, THEREBY DOUBLING THE SIZE OF ITS SECURITY WORKFORCE. IN DECEMBER, FAA ANNOUNCED PLANS TO FURTHER INCREASE ITS SECURITY WORKFORCE BY 35% OVER THE NEXT 20 MONTHS. THAT WILL ADD ABOUT 120 MORE AVIATION SECURITY EXPERTS TO FAA.

THOSE ARE WELCOME MOVES, BUT I MUST CAUTION THAT THEY WILL DO LITTLE TO ENHANCE THE SAFETY OF THE TRAVELING PUBLIC UNLESS THESE EXPERT RESOURCES ARE DEPLOYED IN AREAS WHERE THE THREAT OF TERRORISM IS GREATEST -- SPECIFICALLY TO EUROPE, THE MIDDLE EAST AND THE FAR EAST.

I AM NOT SUGGESTING THAT THE FAA ABANDON ITS SECURITY RESPONSIBILITIES AT DOMESTIC AIRPORTS BUT I AM SUGGESTING THAT IT MUST ASSIGN MORE OF ITS SECURITY PEOPLE TO GROUND DUTIES IN SUPPORT OF AIRLINE SECURITY ACTIVITIES AT HIGH RISK AIRPORTS OVERSEAS.

MY SECOND SECURITY RELATED RECOMMENDATION IS THAT THE GOVERNMENT MUST SPEED THE DEVELOPMENT AND COMMERCIAL APPLICATION OF EMERGING NEW TECHNOLOGIES THAT DETECT HIDDEN EXPLOSIVES. FAA HAS HAD PROMISING RESULTS IN RECENT TESTS OF EQUIPMENT DESIGNED TO DETECT VAPORS EMITTED BY EXPLOSIVES. IT ALSO HAS ACHIEVED SIGNIFICANT BREAKTHROUGHS IN THE DEVELOPMENT

OF THERMAL NEUTRON ANALYSIS, A PROCESS WHICH BOMBARDS BAGGAGE AND CARGO WITH NEUTRONS AND THAT APPEARS CAPABLE OF DETECTING ALL KNOWN EXPLOSIVES IN THE QUANTITIES NECESSARY TO BRING DOWN A COMMERCIAL AIRCRAFT.

FAA RECENTLY ANNOUNCED IT WILL BUY SIX THERMAL NEUTRON MACHINES THIS YEAR AND WILL DO ALL THAT IT CAN TO BRING THIS NEW TECHNOLOGY ON LINE QUICKLY. WE THINK FAA SHOULD INCREASE THAT PURCHASE ORDER. AND WE THINK THE NEW MACHINES, AS WELL AS THE TWO EXISTING UNITS FAA HAS BEEN USING FOR TESTS HERE IN THE UNITED STATES, SHOULD BE AIRLIFTED TO EUROPE AS SOON AS POSSIBLE.

IN ADDITION, THE GOVERNMENT SHOULD HELP NURTURE THESE NEW SCREENING TECHNOLOGIES TO MATURITY BY PROVIDING SEED MONEY FOR THE FIRST INDUSTRY BUY OF STATE-OF-THE-ART EQUIPMENT. FAA PROVIDED FUNDS TO THE AIRLINES IN THE EARLY SEVENTIES TO SPEED THE DEPLOYMENT OF EFFECTIVE METAL DETECTORS AT U.S. AIRPORTS. FINANCIAL ASSISTANCE NOW IS EVEN MORE APPROPRIATE, AND URGENTLY NEEDED, IN MEETING TODAY'S FAR MORE DANGEROUS THREAT OF TERRORISM.

ATA HAS DEVELOPED A PRELIMINARY ESTIMATE OF THE EXPLOSIVES DETECTION EQUIPMENT REQUIREMENTS TO SUPPORT U.S. AIRLINE OPERATIONS AT HIGH-THREAT FOREIGN AIRPORTS AS WELL AS A PRELIMINARY ESTIMATE OF THE COSTS INVOLED. A DETAILED BREAKDOWN OF THESE ESTIMATES IS ATTACHED TO THIS STATEMENT.

IN SUMMARY, OUR PRELIMINARY ESTIMATE IS THAT 66 THERMAL NEUTRON ANALYSIS UNITS AND 171 VAPOR DETECTION UNITS ARE NEEDED TO MEET THE SECURITY REQUIREMENTS OF EIGHT U.S. AIRLINES AT 45 HIGH-THREAT AIRPORTS IN EUROPE, THE MIDDLE EAST AND THE FAR EAST. COSTS ARE ESTIMATED AT $49,500,000 FOR THE THERMAL NEUTRON ANALYSIS UNITS AND $17,100,000 FOR THE VAPOR DETECTION UNITS, FOR A TOTAL PRELIMINARY COST ESTIMATE OF $66,600,000.

WE BELIEVE THAT FEDERAL FUNDING FOR THIS EQUIPMENT IS JUSTIFIED AND WARRANTED. FEDERAL FUNDING COULD BE PROVIDED BY MEANS OF A SPECIAL APPROPRIATION FROM THE AVIATION TRUST FUND FOR THIS PURPOSE.

MY THIRD RECOMMENDATION IS THAT THE UNITED STATES ACCELERATE EFFORTS TO STRENGTHEN INTERNATIONAL AGREEMENTS ON AIRLINE AND AIRPORT SECURITY. THE INTERNATIONAL CIVIL AVIATION ORGANIZATION HAS MADE CONSIDERABLE PROGRESS IN THAT DIRECTION IN RECENT YEARS, BUT MORE NEEDS TO BE DONE. ICAO SHOULD LAY OUT TOUGHER SECURITY STANDARDS AND RECOMMENDED PRACTICES FOR ALL NATIONS.

IT SHOULD BE GIVEN THE RESOURCES IT NEEDS TO EVALUATE SECURITY PROGRAMS AROUND THE WORLD AND THE AUTHORITY TO IMPOSE SANCTIONS AGAINST NATIONS THAT FAIL TO LIVE UP TO ESTABLISHED STANDARDS. THE SPECIAL ICAO COUNCIL MEETING CONVENED LAST MONTH AT THE REQUEST OF THE U.S. AND U.K. GOVERNMENTS WAS A GOOD FIRST STEP IN THAT DIRECTION.

WHILE I AM ON THE SUBJECT OF INTERNATIONAL AGREEMENTS, I

WOULD ALSO LIKE TO URGE PROMPT CONSIDERATION BY THE U.S. SENATE OF THE MONTREAL PROTOCOLS. THAT AGREEMENT, TOGETHER WITH A SUPPLEMENTAL COMPENSATION PLAN MEETING CRITERIA SPECIFIED BY THE EXECUTIVE BRANCH, WILL ASSURE SWIFT, FAIR AND FULL COMPENSATION FOR DAMAGES SUFFERED BY INNOCENT VICTIMS OF TERRORIST ATTACKS ON COMMERCIAL AVIATION. UNDER THE CURRENT REGIME, ESTABLISHED BY THE WARSAW CONVENTION, CLAIMANTS FACE YEARS OF COSTLY AND AGONIZING LITIGATION WHEN ATTEMPTING TO BREAK TREATY-IMPOSED LIMITS OF LIABILITY.

MY FOURTH AND FINAL RECOMMENDATION IS ONE THAT WILL HELP ENSURE U.S. TRAVELERS THE PROTECTION THEY DESERVE UNTIL THE TOUGH INTERNATIONAL STANDARDS I JUST MENTIONED ARE IN PLACE. IT IS THAT FAA IMPOSE THE SAME SECURITY REQUIREMENTS ON FOREIGN CARRIERS SERVING THE UNITED STATES AS IT IMPOSES ON U.S. CARRIERS. ON DECEMBER 29, 1988, FAA MANDATED HEIGHTENED SECURITY MEASURES FOR U.S. AIRLINES SERVING WESTERN EUROPE, THE MIDDLE EAST AND THE FAR EAST. THOSE SAME SECURITY STEPS WERE NOT REQUIRED OF FOREIGN AIR CARRIERS SERVING THE U.S. FROM THE SAME HIGH-THREAT AIRPORTS. WE BELIEVE IT IS IMPERATIVE THAT FAA IMPOSE THE SAME HEIGHTENED SECURITY MEASURES ON FOREIGN CARRIERS SERVING THE U.S. THAT THEY IMPOSED ON U.S. CARRIERS IN THE WAKE OF THE PAN AM CRASH.

THE FACT THAT FOREIGN CARRIERS DO NOT OPERATE UNDER THE SAME SECURITY RULES IS, I THINK, AN OBVIOUS FLAW IN FAA'S CURRENT SECURITY PROGRAM. SOME 50% OF U.S. CITIZENS TRAVELING ABROAD FLY WITH FOREIGN CARRIERS, SO BEEFING UP SECURITY ONLY

FOR U.S. CARRIERS WOULD BE LIKE HAVING POLICE PATROLS ONLY ON ODD NUMBERED STREETS. U.S. CARRIERS FULLY SUPPORT THE ADDITIONAL SECURITY MEASURES ORDERED BY THE FAA FOLLOWING THE FLIGHT 103 TRAGEDY. BUT IF THE UNITED STATES GOVERNMENT IS SERIOUS ABOUT THE SAFETY OF AMERICAN TRAVELERS IT MUST IMPOSE THE SAME REQUIREMENTS ON FOREIGN AIRLINES SERVING THE U.S. FROM THE SAME HIGH-THREAT FOREIGN AIRPORTS.

AN OBJECTIVE ANALYSIS OF THE INCIDENTS IN WHICH EXPLOSIONS HAVE OCCURRED ONBOARD CIVIL AVIATION AIRCRAFT SINCE 1983 CONFIRMS THAT ALL OF CIVIL AVIATION -- THAT IS, AIRLINES OF ALL FLAGS, NOT JUST THE U.S. FLAG -- ARE THE TARGET. 573 OF THE DEATHS RESULTING FROM THESE BOMBS STEMMED FROM DEVICES PLACED ABOARD AIRLINES OF OTHER NATIONALITIES, WHEREAS 274 DEATHS (INCLUDING THE 11 VICTIMS ON THE GROUND IN SCOTLAND) INVOLVED U.S. FLAG AIRCRAFT. FURTHER UNDERSCORING THIS POINT IS THE FACT THAT LAST YEAR THERE WERE ONLY 2 U.S. AIRLINE HIJACKINGS -- THE LOWEST ANNUAL TOTAL SINCE 1973 -- COMPARED TO 13 HIJACKINGS OF FOREIGN AIR CARRIERS DURING THAT SAME YEAR.

I SHOULD NOTE THAT FORMER FAA ADMINISTRATOR MCARTOR WROTE TO HIS COUNTERPARTS IN EUROPE, THE MIDDLE EAST AND THE FAR EAST URGING TIGHTER SECURITY MEASURES. THAT WAS A STEP IN THE RIGHT DIRECTION, BUT IT DOES NOT GO FAR ENOUGH. FOREIGN AIRLINES WITH SERVICE TO THE UNITED STATES SHOULD BE LEGALLY BOUND TO COMPLY WITH U.S. SECURITY REGULATIONS.

LET ME MENTION SOME OF THE THINGS THE U.S. CARRIERS ARE DOING ON THEIR OWN TO ADDRESS THE NEED FOR IMPROVED SECURITY. SEVERAL WEEKS PRIOR TO THE PAN AM EXPLOSION OVER SCOTLAND THE MEMBERS OF ATA LAUNCHED AN AMBITIOUS REVIEW OF SECURITY THAT INVOLVES AN IN-DEPTH LOOK AT SIX KEY ELEMENTS: SCREENER QUALIFICATIONS, SCREENER TRAINING, SCREENER PAY AND BENEFITS, NEW TECHNOLOGY, MANAGEMENT INVOLVEMENT IN SECURITY AND AIRLINE SECURITY TESTING PROGRAMS. ATA SUBSEQUENTLY ASKED OUTSIDE CONSULTANTS TO BID ON THE DEVELOPMENT OF A MODEL TRAINING PROGRAM FOR THE INDUSTRY, AND WE EXPECT TO AWARD A CONTRACT SHORTLY.

THIS KIND OF REVIEW, BY THE WAY, IS NOT UNIQUE. THE AIRLINES CONTINUALLY REASSESS THE NATURE OF THE THREAT THEY FACE AND THE EFFECTIVENESS OF THEIR SECURITY PROGRAMS. THEY TAKE SECURITY SERIOUSLY, AND I THINK THAT IS REFLECTED IN THE RECORD. IN THE 15 YEARS SINCE PASSENGER SCREENING BEGAN THERE HAS BEEN ONLY ONE U.S. HIJACKING OF A MAJOR AIRLINER INVOLVING A REAL FIREARM SMUGGLED THROUGH THE SCREENING SYSTEM. THE U.S. AIRLINES SCREENED MORE THAN 1 BILLION PEOPLE LAST YEAR, FOUR TIMES THE U.S. POPULATION, AND THE SYSTEM DETECTED SOME 3,000 FIREARMS LEADING TO THE ARRESTS OF ABOUT 1,500 PEOPLE. BY FAA ESTIMATES, 118 HIJACKINGS HAVE BEEN PREVENTED SINCE PASSENGER SCREENING BECAME MANDATORY.

IN OTHER WORDS, THE PASSENGER SCREENING SYSTEM IN PLACE AT U.S. AIRPORTS TODAY IS WORKING WELL. IT IS ACCOMPLISHING WHAT IT WAS DESIGNED TO DO, WHICH WAS TO PREVENT HIJACKINGS.

HOWEVER, MEETING THE NEW THREAT OF INTERNATIONAL TERRORISM CLEARLY REQUIRES NEW STRATEGIES -- STRATEGIES CALLING FOR GREATER GOVERNMENT INVOLVEMENT IN AIRLINE SECURITY AND GREATER FOCUS ON AIRPORTS AND AIRLINE OPERATIONS OVERSEAS. GOVERNMENT MUST SHARE THE BURDEN OF SECURITY RATHER THAN PUSH IT OFF ENTIRELY ON THE AIRLINES. IT MUST HELP THE AIRLINES SHORE UP THEIR DEFENSES. IF WE CAN GET THAT KIND OF HELP, AND IF GOVERNMENT CAN TARGET ITS RESOURCES WHERE THE THREAT IS GREATEST, I THINK WE CAN GO A LONG WAY TOWARD SHIELDING TRAVELERS AGAINST THE SCOURGE OF TERRORISM IN THE YEARS AHEAD.

THANK YOU FOR YOUR ATTENTION.

March 8, 1989

## PRELIMINARY ATA ESTIMATES
## EXPLOSIVES DETECTION EQUIPMENT REQUIREMENTS OF U.S. AIRLINES AT HIGH THREAT AIRPORTS IN WESTERN EUROPE AND THE MIDDLE EAST

| AIRPORTS | | AIRLINES | | | | | | | | EQUIPMENT | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AA | CO | DL | NW | PA | PI | TW | UA | TNA | Vapor Detection |
| AMS | Amsterdam | | | | X | X | | X | | 2 | 6 |
| ATH | Athens | | | | | X | | X | | 1 | 4 |
| BCN | Barcelona | | | | | | | X | | 1 | 2 |
| BSL | Basel | | | | | X | | | | 1 | 2 |
| TXL | Berlin | | | | | X | | X | | 1 | 4 |
| BOM | Bombay | | | | | X | | | | 1 | 2 |
| BRU | Brussels | X | | | | X | | X | | 2 | 6 |
| CAI | Cairo | | | | | | | X | | 1 | 2 |
| CGN | Cologne/Bonn | | | | | X | | | | 1 | 2 |
| CPH | Copenhagen | | | | X | | | X | | 1 | 4 |
| DUB | Dublin | | | X | | | | | | 1 | 2 |
| DUS | Dusseldorf | X | | | | X | | | | 1 | 4 |
| FRA | Frankfurt* | X | | X | X | X | | X | | 5 | 10 |
| GVA | Geneva | X | | | | X | | X | | 2 | 6 |
| HAM | Hamburg | X | | X | | X | | X | | 3 | 8 |
| HEL | Helsinki | | | | | X | | | | 1 | 2 |
| INN | Innsbrook | | | | | X | | | | 1 | 2 |
| IST | Istanbul | | | | | X | | X | | 1 | 4 |
| KEL | Kiel | | | | | X | | | | 1 | 2 |
| KHI | Karachi | | | | | X | | | | 1 | 2 |
| LIS | Lisbon | | | | | | | X | | 1 | 2 |
| LGW | London-Gatwick* | X | X | X | X | | X | X | | 6 | 12 |
| LHR | London-Heathrow* | | | | | X | | X | | 2 | 4 |
| MAD | Madrid | X | | | | | | X | | 1 | 4 |
| MHT | Manchester | X | | | | | | | | 1 | 2 |
| MNL | Manila | | X | | X | | | | X | 2 | 6 |
| MXP | Milan | | | | | X | | X | | 1 | 4 |
| MUC | Munich | X | | X | | X | | X | | 2 | 8 |
| DEL | New Delhi | | | | | X | | | | 1 | 2 |
| NCE | Nice | | | | | X | | | | 1 | 2 |
| NUE | Nuremberg | | | | | X | | | | 1 | 2 |
| FBU | Oslo-Fornebu | | | | | X | | | | 1 | 2 |
| GEN | Oslo-Gardermoen | | | | | | | X | | 1 | 2 |
| CDG | Paris-DeGaulle | | | | | X | | X | | 2 | 4 |
| ORY | Paris-Orly | X | X | X | | | | | | 2 | 6 |
| GLA | Prestwick | | | | X | | | | | 1 | 2 |
| RUH | Riyadh | | | | | X | | | | 1 | 2 |
| FCO | Rome* | | | | | X | | X | | 2 | 4 |
| SNN | Shannon | | | X | | | | | | 1 | 2 |
| ARN | Stockholm | | | | | X | | X | | 1 | 4 |
| SXB | Strasbourg | | | | | X | | | | 1 | 2 |
| STR | Stuttgart | | | X | | X | | | | 1 | 4 |
| TLV | Tel Aviv | | | | | X | | X | | 1 | 4 |
| VIE | Vienna | | | | | X | | X | | 1 | 4 |
| ZRH | Zurich | X | | | | X | | X | | 2 | 6 |
| **TOTALS** | 45 | 11 | 3 | 8 | 6 | 32 | 1 | 24 | 1 | 66 | 171 |

*High Volume Stations

### PRELIMINARY ATA COST ESTIMATES

| | |
|---|---|
| TNA (Thermal Neutron Analysis)<br>66 Units @ $750,000 (Quantity Purchase - 50+) | $49,500,000 |
| Vapor Detection (Chemiluminescence)<br>171 Units @ $100,000 (Quantity Purchase - 100+) | $17,100,000 |
| Total | $66,600,000 |

**AIRPORT OPERATORS COUNCIL INTERNATIONAL**

Statement of the

**AIRPORT OPERATORS COUNCIL INTERNATIONAL**

Presented by

Wilfred A. Jackson, Director, Airport Operations
Baltimore-Washington International Airport and

Chairman, AOCI Operations, Safety & Security Committee

on

## AVIATION SECURITY

Before the

Subcommittee on Aviation
Committee on Public Works and Transportation
U. S. House of Representatives

March 21, 1989

* * *

- **AOCI represents the governing bodies that own and operate the principal airports served by scheduled airlines in the United States and around the world.**

- **AOCI member airports enplane more than 90 percent of total domestic and virtually all international scheduled airline passenger and cargo traffic in the United States.**

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(First line of [illegible] should read "MAILBOX TO AOCI")

Good morning Mr. Chairman and Members of the Subcommittee:

I am Bill Jackson, Director of Airport Operations for Baltimore-Washington International Airport. I am pleased to be here today on behalf of the Airport Operators Council International in my capacity as chairman of AOCI's Operations, Safety and Security Committee. The Airport Operators Council International (AOCI) represents the local, regional and state governmental bodies that own and operate the principal airports serving scheduled airlines in the U.S. and throughout the world. AOCI's member airports enplane more than 90 percent of total domestic and virtually all international scheduled airline passenger and cargo traffic in the United States.

We want to thank you for holding this hearing on this very important and sensitive issue, and for giving us the opportunity to express our views. As the local governments responsible for the safe and efficient operation of our nation's airports, we obviously have an intense interest in the enhanced security of airports, air carriers and, most importantly, air travelers.

Aviation security is absolutely vital to the air transportation system upon which our nation's economy and citizens depend, and it can truly be a matter of life-and-death. It is because aviation is so widely used, and because the potential for disaster is so great, that violence and interference with air transportation are so attractive to terrorists. Efforts to ensure the security of commercial aviation require concerted federal and local actions.

## Countering the Threat

We can achieve true aviation security only when the reasons for a terrorist to use violence are relieved, and when the means and opportunities for doing so are removed. Relieving the impulse to commit violent acts against aviation is a matter of world economic and political change, and appropriate for national governments, including this Congress, to address. We need to focus not only on removing the means and opportunity for violence, but on cooperative governmental efforts to interdict terrorists well before they reach airports or aircraft, and certainly, to bring terrorists to justice when they commit heinous crimes against the people of this Nation and the world.

We must enhance the cooperation of every available national and international police and intelligence operation to identify, track and intercept the terrorist before he ever gets near the airport. The terrorist today has as his target not Airline X, but the policies and principles of the United States (or other) government, and that is the level at which government must meet the terrorist head-on. It is the Federal Government which has the intelligence network, resources and jurisdiction to counter international terrorism. Airport operators are committed to doing their part on the local front, but we need leadership, cooperation and support from the Federal Government to do our jobs effectively.

The Federal Government's role in leading and organizing the improvement of aviation security is mainly the responsibility of the Federal Aviation Administration. The Federal Aviation Act gives the FAA responsibility "to protect against terrorist and other criminal threats." No solution is permanent. Each and every initiative to remove the means or opportunity to threaten security is subject to a terrorist's attempts to circumvent that security measure. As the threat has shifted over the last 20 years from hijacking to sabotage and terrorist attacks, the DOT and FAA have toughened regulatory requirements on all U.S. airports and airlines in response to specific incidents, but without regard to specific circumstances and risks.

It is time that the Federal Government conducted a thorough risk assessment and developed appropriate responses and preventive measures that actually enhance federal and local capabilities to effectively increase security, rather than simply adding regulations for the appearance of better security.

We must focus our efforts on realistic and effective means of protecting airports, air carriers and air travelers. Achieving aviation security is very complex and costly. The physical aspects of aviation security are costly because they involve construction or modification of entire facilities and the purchase of expensive, advanced technologies. Every airport has a unique situation, unique facilities and needs, and faces a unique set of threats, which multiplies the complexity, and in turn, the cost, of solutions.

## FAA Airport Access Control Rule

Airport operators have not been idle. We have modified our facilities, installed new equipment, added personnel, and actively worked with airlines, law enforcement agencies and the Federal Aviation Administration to improve security. U.S. airports today have complied with all safety and security requirements of the FAA. Until now, their requirements have been logical, meaningful, and doable, as well as generally affordable. However, the DOT and FAA have taken a precipitous action in issuing a final rule on "Access to Secured Areas of Airports", otherwise known as the access control rule.

Let me state at the outset that we strongly support improved security, and, for that matter, the underlying purpose of the rule itself. It addresses a valid, but very limited possibility, that of the "threat from within" of a disgruntled or deranged employee. To our knowledge, that threat has come to fruition only once in the past 60 years, in the 1987 PSA incident in California. While improved systems must certainly deal with that element, we would suggest that the infinitely greater "threat from without" -- the various forms of terrorism -- has gone virtually unaddressed in this rule. The vast amounts of money that will be needed to implement the rule could be more effectively spent by first identifying the real and potential threats and then targeting resources to develop better systems and measures to counter them.

The rule suggests an average of 128 access points for a phase one airport, which is one that screens more than 25 million passengers annually. However, there are a significant number of major airports at which a single building has more access points than this. The DOT/FAA has neglected to adequately estimate the costs of these systems and to provide funding to ensure that airports are capable of implementing them within the required timeframe. The FAA suggests that it may cost about $170 million for the entire 270-airport facility system. Given the ambiguities of the rule and the lack of clear guidance as to what will actually be required and how extensive these systems must be, we believe it may cost as much as ten times that amount.

As a point of reference, Baltimore/Washington International (BWI) screened approximately 5 million passengers in 1988, yet the airport has more than 130 access points to the air operations area from the terminal building alone. This does not include vehicle gates, air cargo buildings, or general aviation activities. Minneapolis/St. Paul International Airport has more than 500 access points which would cost an estimated $9 million for installation of automated control systems.

At the Port Authority of New York and New Jersey's airports, Kennedy International has more than 1500 access doors in about 50 passenger terminal buildings, Newark International has about two-thirds that number, and La Guardia will have about 750 access points impacted by the rule. For Kennedy alone, the cost of installing access control systems will exceed $27 million, based on an estimated cost of $18,000 per door. That does not include costs for cargo or hangar facilities. Preliminary bid estimates for Kennedy's International Arrivals Building alone indicate installation costs of $4-6 million. In addition to the expensive installation of these systems, airports will have to pay the annual costs associated with operating and maintaining the systems, which could be about 10% of installation costs annually.

Additionally, the rule does not address the issue of asbestos abatement when walls in a 30-year old airport are torn up. I can assure you that this alone is an expensive and complex process.

What else must we spend the money on? We're not sure, because the rule does not describe what types of systems shall be acceptable in meeting yet-unpublished criteria. It does not even tell us what a "secured area" is, much less how extensive the system must be. To illustrate the "Catch-22" dilemma airports face in complying with the rule, let me quote from the rule itself, on page 15:

> "For the same reason that 'secured area' was not defined, the FAA was not specific regarding doors, gates, and other locations to be controlled. To do so would compromise an airport's security program. For that reason, the FAA specifically requested that airport operators not discuss in their comments specific details of current or proposed security arrangements." (Emphasis added).
>
> On page 17, however, the rule states that "since the commenters did not identify the specific issues to be considered to prevent a deterioration of security, the FAA cannot adequately respond to that concern." (Emphasis added). Bureaucracy at its finest.

The FAA must address this issue! We understand the need for confidentiality in such sensitive matters and believe that much of the discussion should not be for public consumption. However, that is no excuse for developing regulations in a vacuum without the opportunity for those affected to discuss legitimate problems and concerns behind closed doors.

There are other problems: Should we not also be concerned about cargo facilities? Where is the responsibility of an exclusive use tenant (airline)? How much responsibility for security passes between the airport and non-aviation tenants such as food service, concessions, or maintenance personnel? The rule does not address these issues.

We must also note that the rule is totally silent on the compatibility of such systems from one airport to another. The very nature of aviation is that anyone is but a few hours from any point on the globe. Yet there is no guidance offered as to whether, for example, the crew of any given airline which stops at seven cities in the course of a day will have to carry seven different access cards today (and seven different ones tomorrow). Nor is there any guidance given as to just how a discharged employee will have his termination announced to the 270 systems at other airports "immediately" -- a term which the FAA also declines to define. To further compound the problem, airports are receiving equally ambiguous, and often conflicting, guidance from FAA's regional offices. We find it virtually impossible to design a system which has no boundaries, and no guidance.

Forcing 270 airports to spend millions of dollars to install access control systems over a period of 30 months when the FAA is unable to answer many questions concerning interpretation and requirements of their own rule is neither prudent nor the most effective approach to increase security.

Having made our point about the ambiguity of the rule's requirements, we move on to the obvious next step: if we accept that we must do what the rule suggests, vague as it may be, we then face the immediate problem of how to pay for these systems and meet the very short time frame required. Unless Congress and the Federal Government provides additional funding to help airports meet this new requirement, monies will have to be diverted from other important airport safety, security and capacity projects.

FAA has stated that it intends to make available from Airport Improvement Program funds only about $28 million for FY '89, and $38 million for FY '90. This money would come out of already limited discretionary funds (approximately $115 million) at the expense of other important projects. Of course, those funds would go only to the few successful grant applicants; other airports must somehow find funding from some other unidentified source. If it is in the national interest to require access control systems at all U.S. airports, then it is certainly the Federal Government's responsibility to provide funding assistance from the available Aviation Trust Fund monies to implement these systems.

Given such a short and unrealistic timeframe for compliance, it is clear that sufficient funding will not be available. Will the market have a sufficient quantity of appropriate technology available, and if not, will the price of the limited number of systems available be bid up to meet deadlines? Perhaps airports will be forced instead to design their systems around available, but lower quality and/or less reliable, equipment, as well as inexperienced contractors to install and/or maintain the systems. This will hardly enhance security.

We strongly urge this Subcommittee to closely monitor and give further guidance to the FAA as it implements the rule. AOCI, ATA and AAAE urged DOT/FAA to first conduct a pilot program and operational testing of automated access control systems to establish the best technology and design, gain operational and monitoring experience, and provide the framework for developing the most effective systems for application at other airports. Unfortunately, DOT/FAA did not heed our concerns. We still believe it is in the best interests of everyone to have a pilot program and operational testing to identify system and operational problems and develop the most effective systems for various airports before requiring extensive, expensive systems at all airports.

## FAA/Airport/Airline Cooperation

Our efforts to combat terrorism requires concerted action and cooperation by the Federal Government, airports and air carriers. However, the current method of FAA levying fines for security violations often creates an adversarial relationship between FAA and the airports and air carriers, to the detriment of security. We are not opposed to fines per se; they may add to the level of awareness at each facility that the government cares about the quality of the service being offered, and intends to continue monitoring.

We believe, however, that FAA could improve this situation in two ways: one, FAA could deemphasize the punitive attitude toward fining airports and carriers for security violations, and instead work directly with them to remedy the system component that failed during the inspection process. Second, if FAA must continue to levy fines, money received from these fines should be applied to air carrier and/or airport security either directly, through grants for security-enhancement projects, or through more FAA security-related research and development. These options would enhance security teamwork, rather than increasing antagonism and reducing funds available to airports and airlines to bolster security.

## Recommendations for Federal Government Action

AOCI strongly endorses the current FAA security-related research and development program, and we urge this Subcommittee to give its full support to those efforts that enhance aviation security. In addition, we recommend initiation of work on human factors to improve passenger screening, and the development of devices to detect non-metallic weapons, such as plastic handguns. We commend the Congress for enacting a law banning plastic weapons; now we need the detection systems to ensure enforcement.

AOCI applauded former FAA Administrator McArtor's decision last December, to accelerate delivery of thermal neutron analysis devices. At FAA's research, engineering and development conference in early December, AOCI and the airline industry had asked FAA to take this step.

We urge this Subcommittee to provide greater emphasis and resources to FAA for the development of vapor detection technology for the inspection of checked and hand-carried baggage and cargo. FAA has had promising results from tests of vapor detection equipment, which offer enormous benefit in the detection of weapons and explosives as well as interdiction of contraband and illegal drugs. There are certainly some problems with the systems which are not appropriate to discuss in open hearings, but vapor detection and thermal neutron analysis are potentially the most productive efforts FAA could make to enhance air transport security.

AOCI also compliments FAA for commissioning work at Baltimore-Washington International Airport to find areas where security can be improved beyond current levels. This underscores our point that pilot programs can be effective in developing procedural and equipment improvements to reduce security risks, without turning airports into military fortresses, which would be unacceptable to the American public.

Only the Federal Government can provide the leadership and funding needed for effective aviation security. AOCI firmly believes that the nature of today's threat requires a much greater role for the Federal Government in aviation security. I would like to bring to your attention the recommendations that AOCI has proposed to the White House, the Secretaries of State and Transportation, and the FAA:

1. The Federal Aviation Administration should be directed by the Secretary of Transportation or Congress to immediately concentrate existing security resources where they are needed most. In recent years, Congress increased FAA's security budget, and more security inspectors and federal air marshals subsequently were hired. They should be assigned to ground security duties, particularly in Europe, the Middle East, and the Far East where the threat of terrorism is greatest and where the presence of government security officials could provide a significant deterrent.

2. The FAA should give higher priority to the development of emerging new technologies, such as thermal neutron analysis devices and "vapor detection" equipment, which can enhance our ability to detect explosives. The agency should devote resources necessary to bring these infant technologies to rapid maturity -- and then use them.

3. The U.S. must accelerate efforts to strengthen international agreements affecting airport security. Through the International Civil Aviation Organization (ICAO), the U.S. Government should seek to establish strong security standards and recommended practices for all nations of the world. ICAO should be given the authority and resources it needs to police such agreements, and to develop and enforce sanctions against governments that fail to live up to established international standards.

4. Pending the achievement of such international standards, FAA should impose the same security requirements on foreign carriers serving the United States that it already imposes on U.S. carriers. The ultimate goal, obviously, is to protect U.S. citizens -- whether they are flying on U.S. or foreign carriers. Following past terrorist attacks on U.S. aircraft, many Americans have switched their business to foreign carriers, believing they were enhancing their security, when in fact they may have been placing themselves in greater jeopardy.

In conclusion, Mr. Chairman, the Federal Government must define and continually re-define the nature of the threats to aviation, and consult and assist airports and airlines in developing and implementing new and better security systems to thwart the ever-changing threat. It may not be appropriate to do this in public forums, and we must all use discretion in discussing the problems and needs of aviation security. But we must get on with a full assessment of current and future risks and making decisions as to where limited resources should be most effectively deployed.

Thank you, Mr. Chairman. I will be pleased to answer any questions you may have.

**American Association of Airport Executives**
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STATEMENT OF THE

AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

BEFORE THE
SUBCOMMITTEE ON AVIATION
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES
MARCH 21, 1989

TESTIMONY OF
THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES
PRESENTED BY
GERALD P. FITZGERALD, A.A.E.
ASSISTANT DIRECTOR OF AVIATION
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
BEFORE THE SUBCOMMITTEE ON AVIATION
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U. S. HOUSE OF REPRESENTATIVES
MARCH 21, 1989

GOOD MORNING MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE. I AM JERRY FITZGERALD, ASSISTANT DIRECTOR OF AVIATION FOR THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY. I HAVE BEEN INVOLVED IN AIRPORT MANAGEMENT FOR THE PORT AUTHORITY FOR 27 YEARS. PRIOR TO ASSUMING MY DUTIES AS ASSISTANT DIRECTOR, I WAS THE MANAGER OF THE OPERATIONS DIVISION FOR JOHN F. KENNEDY INTERNATIONAL AIRPORT FOR FIVE YEARS. I AM CURRENTLY A MEMBER OF THE BOARD OF DIRECTORS OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES (AAAE) AND ON BEHALF OF THE BOARD AND OUR MEMBERSHIP, I WOULD LIKE TO THANK YOU FOR THIS OPPORTUNITY TO TESTIFY ON AVIATION SECURITY.

AAAE IS THE LARGEST PROFESSIONAL ORGANIZATION FOR AIRPORT EXECUTIVES, REPRESENTING OVER 1,400 AIRPORT MANAGEMENT PERSONNEL

RESPONSIBLE FOR THE PLANNING, MANAGEMENT AND OPERATION OF 650 AIRPORTS IN THE U.S. OUR MEMBERSHIP IS TRULY REPRESENTATIVE OF AIRPORT MANAGEMENT. IT IS NEITHER "BIG AIRPORT" NOR "SMALL AIRPORT" ORIENTED, SINCE IT INCLUDES THE EXECUTIVES OF LARGE AND MEDIUM SIZE AIRPORTS AS WELL AS HUNDREDS OF MANAGERS FROM SMALLER FACILITIES, MANY OF WHICH ARE USED EXCLUSIVELY BY GENERAL AVIATION OR REGIONAL AIRPORTS.

OUR WORDS MAY GIVE LITTLE COMFORT TO THE VICTIMS' FAMILIES OF PAN AM FLIGHT 103, BUT WE SINCERELY OFFER OUR CONDOLENCES.

WE COMMEND YOU AND YOUR COLLEAGUES FOR HOLDING THIS HEARING. THE TRAGEDY OF PAN AM FLIGHT 103 DESERVES THE ATTENTION OF THE U.S. CONGRESS, THE ADMINISTRATION AND THE AVIATION INDUSTRY. SAFE AND SECURE TRANSPORT OF AIR TRAVELERS MUST BE THE TOP PRIORITY OF EVERYONE, INCLUDING US, THE AIRPORT MANAGERS. TO IGNORE SUCH A TRAGEDY WOULD BE A DISHONOR TO THE VICTIMS, THEIR FAMILIES AND TO ALL AMERICANS WHO FLY BY AIR.

WHEN THE SYSTEM WORKS AS IT SHOULD, MR. CHAIRMAN, VERY LITTLE ATTENTION IS PAID BY THE MEDIA AND THE GENERAL PUBLIC TO SECURITY MEASURES. INDEED, THOSE THAT ARE VISIBLE TO THE PUBLIC ARE OFTEN REGARDED AS AN INCONVENIENCE. BUT IN THE UNFORTUNATE INSTANCE WHEN SECURITY IS BREACHED, "MONDAY MORNING QUARTERBACKS" -- THE SO-CALLED SECURITY EXPERTS -- EMERGE FROM THE WOODWORK TO CRITICIZE THE SYSTEM.

ON THE INTERNATIONAL FRONT, AAAE COMMENDS SECRETARY SKINNER'S RECENT EFFORTS TO ESTABLISH STRONG SECURITY STANDARDS AND RECOMMENDATIONS PRACTICES FOR ALL NATIONS IN THE WORLD. WE ALSO APPLAUD RAY SALAZAR, THE FEDERAL AVIATION ADMINISTRATION'S (FAA) SECURITY CHIEF, AND HIS STAFF FOR THEIR IMPORTANT CONTRIBUTIONS TO IMPROVING SECURITY. EVEN THOUGH WE DO NOT AGREE WITH FAA ALL OF THE TIME ON SECURITY ISSUES, RAY AND HIS PEOPLE ARE ALWAYS WILLING TO LISTEN TO OUR CONCERNS.

FAA SAID RECENTLY, "THE INCREASE IN CRIMINAL ACTIVITIES TARGETED AT AVIATION, THE SOPHISTICATION OF TECHNIQUES AND TECHNOLOGIES EMPLOYED IN THESE ILLEGAL ACTIVITIES AND THE POTENTIALLY DEADLY AND COSTLY CONSEQUENCES OF AVIATION SECURITY VIOLATIONS, HAVE STRENGTHENED THE IMPORTANCE OF CIVIL AVIATION SECURITY AS A MAJOR MISSION AREA OF THE FAA." WE COULD NOT AGREE MORE. AAAE AND ITS MEMBERS HAVE ALWAYS BEEN ACTIVE PARTICIPANTS IN THE EFFORTS TO IMPROVE SECURITY AT OUR NATION'S AIRPORTS. THE AIRPORTS AND AIRLINES TAKE SECURITY VERY SERIOUSLY AND WILL CONTINUE TO COOPERATE WITH FAA ON IMPLEMENTING PROGRAMS THAT WILL IMPROVE SECURITY PROCEDURES.

IT IS VIRTUALLY IMPOSSIBLE, HOWEVER, TO PERCEIVE AND PREVENT EVERY THREAT TO OUR AVIATION SYSTEM. IF SOMEONE IS INTENT ON VIOLATING SECURITY PROCEDURES, HE WILL FIND A WAY TO SUCCEED. IT IS IMPOSSIBLE TO DESIGN AN AIR TRANSPORTATION SYSTEM CAPABLE OF PROCESSING OVER 450 MILLION PASSENGERS A YEAR -- LET ALONE ALL THE VISITORS THAT ACCOMPANY EACH PASSENGER TO THE AIRPORT -- AND

GIVE 100 PERCENT ASSURANCE THAT NOTHING WILL EVER HAPPEN. THE ONLY WAY TO UNEQUIVOCALLY GUARANTEE AN IMPENETRABLE SECURITY SYSTEM IS TO SHUT THE AIR TRANSPORTATION SYSTEM DOWN. IN A DEMOCRATIC SOCIETY THAT GUARANTEES THE FREEDOM OF MOVEMENT, WE MUST FIND SECURITY MEASURES THAT DO NOT UNREASONABLY IMPINGE ON THAT RIGHT.

IF WE DON'T GROUND ALL THE AIRPLANES, WHAT THEN? REALISTICALLY, THE MOST THAT CAN BE DONE IS TO DESIGN AND IMPLEMENT PROCEDURES AND SYSTEMS THAT WILL MEET THE REAL SECURITY THREAT, NOT SOME IMPROBABLE "WHAT IF" FANTASY.

A PRO-ACTIVE APPROACH TO DESIGNING SYSTEMS THAT SOLVE TOMORROW'S SECURITY PROBLEMS MUST INCLUDE A MAJOR AND AGGRESSIVE RESEARCH AND DEVELOPMENT (R&D) PROGRAM BY THE FEDERAL GOVERNMENT. YET, THE CURRENT R&D BUDGET FOR SECURITY IS ONLY ABOUT 5 PERCENT OF THE FAA'S TOTAL R&D BUDGET. MORE R&D FUNDING FOR FAA SECURITY PROGRAMS MUST BE MADE AVAILABLE BY CONGRESS IF WE ARE TO MAKE ANY PROGRESS.

FOR INSTANCE, WE ARE FULLY BEHIND THE CURRENT R&D EFFORT TO DEVELOP EFFECTIVE EXPLOSIVE DETECTION DEVICES, SUCH AS THE THERMAL NEUTRON ANALYSIS THAT WILL ALERT AUTHORITIES TO PLASTIC EXPLOSIVES CONTAINED IN CHECKED LUGGAGE AND CARRY ON BAGS, AND THOSE CARRIED ON BOARD BY A PASSENGER. THIS IS A VERY WORTHWHILE PROJECT, ONE THAT WE BELIEVE APPROPRIATELY ADDRESSES THE MOST PRESSING THREATS IN THE SECURITY ARENA. THERE MAY BE

OTHER SIGNIFICANT PROJECTS THAT HAVE THE POTENTIAL OF RESPONDING TO THREATS AGAINST AVIATION, AND THESE AREAS SHOULD BE EXAMINED AS SOON AS FUNDING IS MADE AVAILABLE.

FAA MUST CONTINUE TO CONDUCT STUDIES TO ASSESS THE VULNERABILITY OF INTERNATIONAL AND U.S. AIRPORTS TO CURRENT THREATS. THIS ESSENTIAL FIRST STEP ALLOWS BOTH FAA AND THE AIRPORT OPERATOR TO ASSESS PROPERLY JUST WHAT MEASURES ARE REQUIRED TO DEAL WITH PERCEIVED THREATS EFFECTIVELY. THIS ALSO ALLOWS FAA, IN CLOSE COOPERATION WITH THE AIRPORTS AND AIRLINES, TO DETERMINE THE BEST WAY TO EMPLOY "STATE OF THE ART" TECHNOLOGIES AND OPERATIONAL PROCEDURES IN THE MOST ECONOMICALLY VIABLE AND RESPONSIVE MANNER. YOU SIMPLY PUT YOUR RESOURCES WHERE THEY WILL DO THE MOST GOOD.

MR. CHAIRMAN, AIRPORT EXECUTIVES WILL BE FIRST TO STAND UP AND APPLAUD EFFORTS THAT WILL ADD REAL IMPROVEMENTS TO AVIATION SECURITY. HOWEVER, WE ARE MOST CONCERNED ABOUT THE RECENT RULE REQUIRING THE TOP 269 U.S. AIRPORTS TO INSTALL COMPUTERIZED ACCESS DOORSYSTEMS AT ALL AREAS LEADING TO AIRCRAFT OPERATING AREAS. IN OTHER WORDS, EVERY DOOR AT AN AIRPORT WHICH EMPLOYEES USE TO GAIN ACCESS TO THE AIRCRAFT RAMP AREAS, MUST BE CONVERTED TO A COMPUTERIZED, LOCKED DOOR THAT ONLY OPENS TO CONTROL CARD ENTRY. AAAE IS GENERALLY SUPPORTIVE OF THE CONCEPT, BUT THERE ARE SEVERAL UNANSWERED QUESTIONS THAT WE BELIEVE WILL EVENTUALLY UNDERMINE THE INTENT AND EFFECTIVENESS OF THE PRESENT REGULATION.

FIRST, AND MOST IMPORTANTLY, WE WONDER WHETHER THE MILLIONS OF DOLLARS THAT WILL BE SPENT OVER THE NEXT FEW YEARS TO INSTALL THESE SYSTEMS COULD NOT BE USED ON MORE APPROPRIATE MEASURES, SUCH AS EXPLOSIVE DETECTION DEVICES. IN OUR SOCIETY, EVERYTHING HAS A PRICE TAG. PUBLIC OFFICIALS ARE NO LONGER IN THE POSITION OF SPENDING UNLIMITED TAX MONIES ON EVERY CONCEIVABLE SECURITY OR SAFETY PROGRAM. CHOICES MUST BE MADE. THIS RULE IS NO DIFFERENT. MR. CHAIRMAN, PLEASE BE ASSURED THAT AIRPORT EXECUTIVES ARE NOT AGAINST SPENDING MILLIONS OF DOLLARS AND FOCUSING OUR ATTENTION TO IMPROVE SECURITY. IT IS SIMPLY A MATTER OF THE PRIORITY FOR LIMITED FUNDS, AND LIMITED EXPERT TIME, AVAILABLE TO THE INDUSTRY.

SECOND, THERE IS THE CONCERN ABOUT THE COMPATIBILITY OF THESE COMPUTERIZED SECURITY SYSTEMS. IF THIS NEW REGULATION IS TO PROVIDE MEANINGFUL SECURITY IMPROVEMENTS, IT MUST ASSURE STANDARDIZATION OF THE ACCESS TECHNOLOGY AND COMPATIBILITY OF SYSTEMS AMONG AIRPORTS AND BETWEEN AIRPORTS AND AIRLINES. WITHOUT COMMONALITY, EACH AIRPORT COULD SELECT A TOTALLY DIFFERENT CARD-READING OR KEYPAD SYSTEM. AS A RESULT, AIRLINE CREWS WOULD HAVE TO CARRY A DIFFERENT IDENTIFICATION CARD FOR EACH AIRPORT THEY PASS THROUGH, MAKING THESE SYSTEMS ENTIRELY INEFFICIENT AND QUITE POSSIBLY UNSECURE.

THE FEDERAL GOVERNMENT NEEDS TO TAKE THE LEAD IN PROVIDING A BASIC OPERATING SYSTEM THAT DOES NOT DISQUALIFY VENDORS FROM BIDDING ON THESE SYSTEMS BUT WILL ALLOW THESE COMPUTERS TO SPEAK

TO EACH OTHER IN THE SAME LANGUAGE. WE ARE NOT COMPUTER EXPERTS, BUT QUESTION WHY WE CAN NOT DEVELOP A COMPATIBLE SYSTEM SIMILAR TO THE ATM BANK MACHINE WHICH ALLOWS ONE TO USE THE SAME CARD FOR EVERY ATM BANK MACHINE LOCATION. COMPATIBILITY IS A MAJOR DEFICIENCY IN THIS RULE.

THIRD, FAA MUST REEVALUATE A RECENT POLICY DECISION THAT, IN EFFECT WILL FORCE AIRPORTS INTO ROLES OF SURROGATE REGULATORS OF THE VARIOUS TENANTS OPERATING ON AIRPORTS, EVEN MILITARY INSTALLATIONS ON AIRPORTS. ANY EFFECTIVE SECURITY SYSTEM MUST FORCE INDIVIDUAL TENANTS OF AN AIRPORT -- AIRLINES, FIXED BASED OPERATORS, AIR CARGO COMPANIES -- TO BE ULTIMATELY RESPONSIBLE AND ACCOUNTABLE FOR THE SECURITY OF THEIR EXCLUSIVE AREAS. TO MAKE A THIRD PARTY, SUCH AS THE AIRPORT OPERATOR, RESPONSIBLE FOR VIOLATIONS IN AREAS THEY CANNOT MONITOR AND CONTROL 24 HOURS A DAY IS NAIVE AND IRRESPONSIBLE. ANYTHING LESS WILL CREATE MORE PROBLEMS THAN IT WILL SOLVE.

FOURTH, THE U.S. CONGRESS MUST PROVIDE DEDICATED FUNDING FOR THESE ACCESS SYSTEMS OUTSIDE THE REGULAR AIRPORT IMPROVEMENT PROGRAM. THE INDUSTRY ESTIMATES THAT THESE COMPUTERIZED SYSTEMS COULD COST THE TAXPAYERS AS MUCH AS $900 MILLION, EXCLUDING GENERAL MAINTENANCE, OVER THE NEXT 10 YEARS. (THAT SAME AMOUNT OF MONEY WOULD BUY APPROXIMATELY 1,100 THERMAL NEUTRON ANALYSIS SYSTEMS, AN AVERAGE OF FIVE SYSTEMS FOR EVERY U.S. AIRPORT COVERED BY THIS RULE.) IN FACT, THE COSTS COULD SOAR OVER $1 BILLION BECAUSE THE FINAL RULE ENCOMPASSES ALL BUILDINGS AT AN

AIRPORT, NOT JUST THE TERMINAL FACILITY, AS PROPOSED IN THE ORIGINAL NPRM. ENTITLEMENT OR DISCRETIONARY FUNDS USED TO PAY FOR THESE SYSTEMS WILL FORCE AIRPORTS TO FOREGO OTHER EQUALLY IMPORTANT SECURITY OR SAFETY IMPROVEMENTS AT THEIR FACILITIES. THERE MUST BE DEDICATED FUNDING SO THAT WE DO NOT SACRIFICE OTHER CRITICAL SAFETY PROJECTS AT OUR NATION'S AIRPORTS.

AND, FIFTH, EVEN THOUGH FAA BUILT IN SOME ADDITIONAL TIME FOR SYSTEM PLAN APPROVAL AND IMPLEMENTATION AT SMALLER AIRPORTS, THE OVERALL TIME REQUIREMENTS CONTAINED IN THE FINAL REGULATION ARE NOT ADEQUATE TO PROVIDE FOR A REALISTIC EVALUATION OF THESE SYSTEMS. THE LIMITED DOMESTIC AIRPORT EXPERIENCE IN THIS AREA, COUPLED WITH THE LIMITED SOURCES OF EXPERTISE, REQUIRES AN ORDERLY AND PRACTICAL WORK PLAN. AS IT STANDS NOW, MANY AIRPORTS, BECAUSE OF THE TIGHT TIMEFRAMES AND THEIR OWN BUDGET PROCEDURES AND CONSTRAINTS, WILL INSTALL WRONG SYSTEMS THAT EVENTUALLY WILL HAVE TO BE REPLACED AT A CONSIDERABLE COST TO THE TAXPAYERS. A MORE REALISTIC TIMEFRAME WILL AVOID HAVING TO "REINVENT THE WHEEL".

WHAT IS THE PRACTICAL IMPACT OF THE RULE AS IT NOW STANDS? SIMPLY STATED, AN OPERATIONAL NIGHTMARE. FOR EXAMPLE, IN HUNDREDS OF COMMUNITIES, THE AIRPORT IS OPERATED ON A 24-HOUR BASIS, EVEN THOUGH THE FIXED BASED OPERATOR (FBO) IS CLOSED SOME OF THAT TIME. THIS MEANS THAT IF A GENERAL AVIATION AIRCRAFT FLIES INTO ONE OF THESE AIRPORTS DURING PERIODS WHEN THE FBO IS CLOSED, ONCE THE PILOT AND HIS OR HER PASSENGERS, SUCH AS YOU, MR. CHAIRMAN, EXITS THE PLANE, HE OR SHE IS IN VIOLATION OF THE AIRPORT'S SECURITY PROGRAM UNLESS THEY HAVE AN AIRPORT-ISSUED ID.

AIR AMBULANCES AND OTHER LIFE-SAVING MISSIONS WHICH REGULARLY OPERATE 24 HOURS A DAY ALSO WOULD BE UNABLE TO ENTER AND EXIT THE AIRPORT WHEN TIME IS OF THE ESSENCE UNLESS THEY HAVE A VALID ID. WHEN FAA WAS QUESTIONED ON THIS SUBJECT, THE RESPONSE WAS THAT GENERAL AVIATION AREAS OF THE AIRPORT SHOULD BE PHYSICALLY SEPARATED FROM THE REST OF THE AIRPORT BY A PERIMETER FENCE OR SOME OTHER OBSTACLE TO PREVENT UNAUTHORIZED ACCESS. THIS SEEMS ALL WELL AND GOOD UNTIL YOU INQUIRE ABOUT THE BEST WAY IS TO TAXI AN AIRCRAFT THROUGH A 10-FOOT-HIGH BARBED WIRE FENCE.

FINALLY, AT AIRPORTS WHERE THE NATIONAL GUARD OR ANOTHER ACTIVE DUTY MILITARY BASE OPERATES, EACH AND EVERY MILITARY MEMBER THAT ENTERS THE BASE WOULD BE REQUIRED TO BE BADGED BY THE AIRPORT IN ORDER TO RECEIVE UNESCORTED ACCESS TO THE BASE. AS YOU KNOW, MR. CHAIRMAN, SECURITY AT AN AIR FORCE BASE WITH FRONT LINE FIGHTERS OR AIRCRAFT FAR EXCEEDS ANY FAA REQUIREMENT. UNDER THIS REGULATION, HOWEVER, THESE MILITARY PERSONNEL WOULD STILL HAVE TO HAVE AN AIRPORT ID, EVEN THOUGH THEY WILL BE NOWHERE NEAR COMMERCIAL AIRCRAFT.

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, AAAE STANDS READY TO WORK WITH CONGRESS, THE AIRLINES, OTHER USERS AND THE FAA TO DEVISE AND INSTALL SYSTEMS AND PROCEDURES THAT WILL PROVIDE REAL

-- NOT COSMETIC -- IMPROVEMENTS TO OUR AVIATION SECURITY PROGRAM. ANYTHING LESS WOULD BE A DISSERVICE TO THE TRAVELING PUBLIC. BUT IN OUR FERVOR TO ADDRESS SECURITY ISSUES, WE MUST USE COMMON SENSE AND EXPEND OUR RESOURCES WHERE THEY WILL BE THE MOST EFFECTIVE IN DETERRING THOSE WHO ARE INTENT ON DOING HARM TO THE TRAVELING PUBLIC. THANK YOU AGAIN FOR PROVIDING US WITH THIS OPPORTUNITY TO EXPRESS OUR VIEWS ON THE IMPORTANT ISSUE OF SECURITY.

Mr. **Oberstar**. Our next panel are a very special group of people, who represent those whose lives were tragically ended in that one awful, blinding, destructive moment over Lockerbie, Scotland; Ms. Victoria Commock of Coral Gables, Florida, Ms. Rosemary Wolfe of Alexandria, Virginia, and Mr. Paul Hudson of Albany, New York.

Before we begin with the testimony from the families of the victims of Pan Am 103, some thoughts occurred to me drawn from that beautiful and poignant, and still instructive Pulitzer Prize winning novel of Thornton Wilder, the Bridge of San Luis Rey, and if my colleagues will indulge me:

"On Friday noon, July the twentieth, 1714, the finest bridge in all Peru broke and precipitated five travellers into the gulf below. This bridge was on the high-road between Lima and Cuzco and hundreds of persons passed over it every day. It had been woven of osier by the Incas more than a century before and visitors to the city were always led out to see it. It was mere ladder of thin slats swung out over the gorge, with handrails of dried vine. The bridge seemed to be among the things that last forever; it was unthinkable that it should break. The moment a Peruvian heard of the accident he signed himself and made a mental calculation as to how recently he had crossed by it and how soon he had intended crossing by it again. People wandered about in a trance-like state, muttering; they had the hallucination of seeing themselves falling into a gulf.

There was a great service in the Cathedral. The bodies of the victims were approximately collected and approximately separated from one another, and there was a great searching of hearts in the beautiful city of Lima. Servant girls returned bracelets which they had stolen from their mistresses and usurers harangued their wives angrily in defense of usury. Yet it was rather strange that this event should have so impressed the Limeans, for in that country those catastrophes which lawyers shockingly call the 'acts of God' were more than usually frequent. Tidal waves were continually washing away cities; earthquakes arrived every week and towers fell upon good men and women all the time. That is why it was so surprising that the Peruvians should have been especially touched by the rent in the bridge of San Luis Rey.

"Everyone was deeply impressed, but only one person did anything about it, and that was Brother Juniper. This little red-haired Franciscan from Northern Italy happened to be in Peru converting the Indians and happened to witness the accident.

"It was a thought that visited Brother Juniper, why did this happen to those five? If there was any plan in the universe at all, if there were any pattern in a human life, surely it could be discovered mysteriously latent in those lives so suddenly cut off. Either we live by accident and die by accident, or we live by plan and die by plan. And on that instant Brother Juniper made the resolve to inquire into the secret lives of those five persons and to surprise the reason of their taking off."

Thornton Wilder might have written about Pan Am 103.

I think those words frame our hearing, and your testimony.

## TESTIMONY OF MS. VICTORIA CUMMOCK, CORAL GABLES, FL; MS. ROSEMARY WOLFE, ALEXANDRIA, VA; AND PAUL HUDSON, ALBANY, NY

Ms. Cummock. Thank you. At this time I'd like to read a prepared statement from the victims of Pan Am Flight 103.

Today, March 21st, marks three months after the destruction of Pan Am 103. I am here representing the families and the friends of the American citizens who were murdered when Pan Am 103, from Frankfurt and London to New York was obliterated by a brutal terrorist bomb. Nothing we can say or do can bring our loved ones back, but we are here because of what you, as our legislators, can say or do to improve airport and airline security, can prevent this horrible part of airline history from every happening again.

We believe that the 270 lives lost on Flight 103 could have been saved, and that this bombing could have been prevented. We believe that those who conclude that little or nothing can be done about terrorist attacks on airlines are grievously wrong, and motivated either by commercial considerations, dereliction of duty, or efforts to conceal and tolerate inadequate systems.

We speak in sorrow, and we are motivated not by bitterness but by concern for air travelers' lives that can still be saved. We are not experts on the cause and on the cure of terrorism or on criminal behavior, but this needless tragedy that seared our lives, has required us to learn more about airline security than we ever wanted to know. We are shocked by what we have found. We are determined to obtain action that can substantially reduce the prospects for countless more disasters like Pan Am 103.

Specifically, five problem areas require immediate action. These areas are pre-notification, detection, coordination, compensation and crisis management.

First, pre-notification. Pre-notification of passengers, baggage handlers and concerned governmental and airline officials of serious high level threats to airline security is imperative. The lack thereof is inexcusable. Only a small number of threats are deemed sufficiently serious each year by the FAA to be the subject of a high level security bulletin. Any airline that is the subject to such threat should be *obligated* to notify each passenger prior to boarding, permitting the passengers to choose whether or not to take the flight. Surely every American citizen deserves that freedom of choice, based on notice and information. The policy of so-called "selective notification" is contemptuous of human life, passenger interest and American legal traditions. Had the passengers of Pan Am 103 been informed by the airline about the FAA bulletin, we believe that many of them would not have been aboard that plane and would be alive today.

In addition, we feel that every flight captain should be notified of all threats to his flight and must be required to sign off at the gate. He must possess full authority to delay or cancel the flight if he feels that the security of his passengers cannot be guaranteed, without recourse from the airline. Safety, not sales, can be the only criterion.

Second, more adequate detection equipment. More adequate detection equipment, personnel and procedures must be installed for every airport and every airline. This will require more money, from both governments and airlines; but the amount that we now spend per passenger is absurdly low and the current level, or more accurately the current lack, of effective security measures is intolerable. For example, it has been known at least since 1986 that plastic bombs in checked baggage could not be detected by existing systems and posed the single most serious terrorist threat to international travelers. FAA stated new equipment to detect such bombs would be available in 1987. But such equipment had not been installed or even ordered on December 21st, and is still not being installed or ordered today. We must get priorities straight. The right to safe air travel must be provided by you, our Government. We must institute mandatory safety procedures and install available plastic bomb detection equipment utilizing the $6 billion in the Aviation Trust Fund.

Mr. McCurdy stated today that there have been six units ordered this year. We don't think that that's enough. It will take a year and a half to get all the airports up to speed. Simple economics of supply and demand would provide more units utilizing the funds here that are available.

Airport security personnel are too often ill-paid, ill-trained, and ill-qualified, and uninformed. Their methods and procedures are too often inconsistent from one airline to the next and ill-considered at best. FAA security personnel are also insufficient in number and in training. Surely there is no higher priority in the appropriations process than the saving of our citizens' lives.

Third, more adequate coordination, communication and involvement among all agencies engaged in gathering intelligence and combating airline terrorism, including the FBI, the State Department, the CIA, the National Security Agency, and the Federal Aviation Administration and airport/airline authorities, is essential to prevent terrorist attacks on airlines. Today, however, responsibility is taken by no one, and decisions are made by virtually everyone. The FAA largely leaves all questions of implementation to mid and low-level airline employees who receive no clear guidelines from the FAA and no carefully and consistently compiled and evaluated information.

Fourth, more adequate compensation by way of damages to the families of victims of international air disasters is going to be the only way to prod the airlines into upgrading and maintaining their security systems, procedures and policies. The obviously outdated Warsaw Convention of 1929 now places an unrealistically low cap of $75,000 on the value of each passenger's life. As the Government of Italy has already advocated, this cap must be eliminated or drastically removed to protect the families of international flight victims. As it stands right now, a limit of $75,000 liability is not sufficient incentive for the airlines to take necessary security measures and act in a responsible manner.

Fifth, mandatory crisis management procedures. Policies and procedures must be instituted throughout the airline industry for crisis management. Families must not be left to rely on the media, as we were, as their only source of information during an air disaster. No matter what the reason for the air disaster, one government agency should be appointed to insure that first, all of the victims families are notified immediately of an air disaster. Second, to assign one liaison to each family who is authorized to provide and disseminate pertinent information on a daily basis, about areas such as general crash information, if there's survivors, if there are bodies, what basically has happened; they should also give us information about procedures, documents needed to ID bodies, the number of bodies found, time frame to ID the bodies, and so forth; they should tell us about the investigation, who is in charge of it, what agencies will contact us, what will be needed from the victims' families, and then coordinate those agencies to have access to basic biographical information about the victims' families to minimize repetition and harassment of the victims' families; and last, personal belongings, what is the process involved in returning personal belongings, no one has informed us of that, and standardize the type of information and format needed to identify personal effects.

So pre-notification, detection, coordination, compensation and crisis managements must be addressed now. But, as we all know, each of them takes time, and passenger safety must be protected in the interim. We therefore demand that the FAA enforce the following emergency stop-gap measures until the permanent measures discussed above are in place.

First, all carry-on and checked baggage must be hand searched until proper bomb detection equipment is in place. It must be sealed as soon as the appropriate security checks have been completed, and matched with passengers. Any unattended or abandoned baggage must then be turned over to security personnel.

Second, the El Al air procedures of utilizing security personnel to question all passengers should be adopted by all airlines at least on a stop-gap basis.

Third, late arriving passengers should either be denied entrance or subjected, regardless of possible flight delays, to the same screening process that other passengers have already gone through.

Fourth, all un-accompanied luggage must be searched for explosives before allowing it on the plane.

We must eliminate curbside check-in.

We also must mark each bag after it's gone through security, making sure only bags that have been checked are loaded on to the planes. Limit access to the planes by airline and airport personnel once bags are checked.

Next, assign special seats to suspicious passengers where flight crews and FAA sky marshals can monitor them.

Keep non-passengers out of domestic and international concourses.

Isolate passengers on connecting flights coming from other airports, where security is weak, requiring them to go through security checks.

We must have one uniform security system for all airports and all airlines, as opposed to different agencies working the same airport with little or no coordination.

We need to raise the caliber and provide necessary training to security people. At minimum wage, you get what you pay for.

An 800 number should be established with information on airline threats, and that's high-level airline threats, enabling ticketed passengers to contact the specific airline mentioned for details, and then to decide for themselves whether they want to take a particular flight.

And finally, ban electronic devices large enough to contain plastic explosives' of the type that destroyed Pan Am 103, until new plastic bomb detection monitors are installed.

No doubt these recommendations and interim procedures will involve cost, inconvenience and complaints. But they will also save lives.

Finally, we urge this Committee to obtain a better sense of the confusion and the cover-up that now characterizes international airline security by investigating a particular case—the case of Pan Am 103. We have attached as an appendix to this statement, a series of questions for which you will be able to obtain answers better than we can.

Those answers will not bring back our loved ones, massacred on December 21st at 31,00 feet. Neither will the remedial measures we have advocated here. But at least those measures and others like them can help to increase the safety of our airways. At least they can help to prevent other potential murderers from inflicting pain on more people, no doubt including air travelers like you and your families. If action is taken now that saves the lives of countless others, then the terrible tragedy of last December will have at least produced some small gain to offset the terrible loss that we have suffered.

We are grateful for your consideration today of our views, and we are hopeful that you will take the earliest action accordingly. We hope that you concur and recommend a full Congressional investigation in order to get both Senate and House Committees to institute mandatory changes and provide necessary funds to change the current system and do everything in your power to avoid history from repeating itself.

Thank you very much.

Mr. **Oberstar.** Thank you very much, Ms. Commock, and I'll reserve comments until I've heard from the other witnesses.

Mr. **Oberstar.** Ms. Wolfe?

Ms. **Wolfe.** Mr. Chairman, my name is Rosemary Wolfe. My 20-year old stepdaughter, Miriam Luby Wolfe, a student of musical theatre at Syracuse, was a victim aboard Pan Am Flight 103. I thank the Chairman and members for calling this hearing and appreciate the opportunity to appear before you today, on this the three-month anniversary of the bombing.

Just a few days ago, as I was getting ready to prepare this testimony, my family learned that only two of Miriam's personal effect to have been identified so far are a watch and an earring. She liked to collect jewelry that had the masks for the muses of comedy and tragedy. As it turned out, the earring she was found still wearing was the muse of tragedy. This was a chilling and startling reminder that the legacy of Pan Am Flight 103 is that it could happen again, that we must take immediate steps to ensure that security and warning systems are improved and implemented in enough time to stop another disaster.

This must involve not only the airlines, which have the responsibility for establishing and carrying out security operations, but also

FAA, which regulates airline security, the Department of Transportation, which oversees FAA, the State Department, which manages our policy, and the Congress, the watchdog of new legislation.

My family has many unanswered questions about how the tragedy could have been averted and why it was not. Why weren't the passengers and their families warned? Why didn't airline security detect the bomb? We now know that, prior to the bombing of Flight 103, FAA issued two security bulletins involving Frankfurt that alerted Pan Am and other U.S. airlines abroad about bomb threat dangers. One on November 18th about a bomb contained in a Toshiba Bombeat 453 radio which had been seized by West German police in an anti-terrorist raid in Frankfurt, and one on December 7 relating that a caller to the State Department in Helsinki said that a bombing attempt would be made before Christmas aboard a Pan Am plane traveling from Frankfurt to the United States. These two FAA Security Bulletins were reportedly two of only 27 Security Bulletins issued by FAA last year. There were reportedly hundreds of warnings related to air travel, but only 27 were considered important enough to achieve the high level status of security bulletins.

What did the airlines, FAA and the State Department do with this information? Why didn't they make a connection between the two bulletins and ensure that strict security was enforced when Frankfurt was involved in both bulletins. Why weren't pilots, who were on board security officers and flight crews not informed of the security bulletins? Were Pan Am crews even told about the November 4th FAA Security Bulletin, we just learned about yesterday which cautioned U.S. carriers operating in Europe about a possible hijacking? Given the high-level warnings in the November 18th and December 7th FAA bulletins, did Pan Am airport staff x-ray checked luggage originating at Frankfurt and Heathrow and coming into Frankfurt from other airports for radio cassettes? Why wasn't checked luggage matched to passengers? What efforts were made to question people? Were any Pan Am flights, including Flight 103 on December 21st, or any other U.S. airline flights originating in Europe searched for bombs? Did FAA make any specific recommendations to the airlines on ways of increasing security after the two FAA Security Bulletins on bomb threats were issued? We do not know if additional security measures were taken. We do know one thing, whatever measures were used, they weren't good enough.

In light of the British announcement asking all carriers into their airports to assure that radio cassettes be removed and banned from luggage, we ask whether the Secretary of Transportation and FAA will make this a matter of policy for all U.S. carriers and airports?

We have unanswered questions about the high number of empty seats—some reports say over 160—on Pan Am Flight 103 on December 21st, and Pan Am sales of half price tickets for the flights. According to some reports from travel agents, the flight was booked in October. If seats were cancelled, when were they cancelled, who cancelled them and why?

I know of a specific situation regarding the tickets. One of Miriam's best friends called Pan Am on December 15th and asked about the possibility of getting on Flight 103 on December 21st. She was told that she would have to be considered for standby, however, the tickets would be half price if there were availability. Now, on December 15th there was apparently a standby situation. What happened between December 15th and December 21st, when 168 seats became vacant? That's one of the questions that many of us have.

Looking beyond the two months preceding the bombing of Flight 103, there are unanswered questions about the detection of plastic bombs and how FAA and the airlines dealt with this limitation. Since 1982, the U.S. Government and airlines have known that security measures to protect U.S. airlines abroad were not adequate and that plastic bombs could go undetected. FAA did accelerate its order of six Thermal Neutron Analysis devices, which can effectively detect plastics, like Semtex, used in the bomb that destroyed Flight 103. However, what is difficult to understand is why FAA and the airlines, given their knowledge of inadequacies in plastic bomb detection, knowledge that TNAs would not be in use for some time, and of increasing threats from terrorists, did not require or put into use widespread x-ray devices which are on the market now that can pick up the differences between inorganic materials and organic materials like plastics.

These x-ray devices, known as E-scans, although they are not nearly as effective as TNAs can pick up the presence of plastics, which show up as brownish-orange. The complete cost of the device is about $60,000 to $65,000. Airlines also have the option of adding E-scan enhancers to existing black and white x-rays at a cost of only $20,000. E-scans are available and are being used only on a limited scale by U.S. airlines. Until TNA devices can be introduced on a wide scale, why aren't E-scans, given their low cost, being put into widespread use to detect plastics.

Now, I've been told by some people who have familiarity with the E-scan system that regarding Flight 103, that machines would have been able to detect the plastics because there would have had to have been enough sheets of the plastic, given the amount of poundage in that bomb, to show up on a x-ray. So this is a very big question that we have. Why aren't these machines being put in use right now?

Regarding the TNA devices themselves, it has been estimated that U.S. airlines would need 66 units at some 45 airports at a cost of $48.5 million. Congress can move forward to authorize special monies for the acceleration of TNAs and other devices on the market, and for further research and development.

As legislators, you are also in the position to pass special legislation, as introduced by Senator D'Amato last week, to set up a new system of aviation security threat notification. Senator D'Amato's bill provides the Secretary of Transportation must set up a system to evaluate and grade the credibility and severity of threats against international aviation. If the Secretary of Transportation determines that a credible threat exists, he must immediately notify the Secretary of State, affected air carriers, and airports. The State Department must establish a 24-hour, toll-free consumer hotline to inform the public about credible threats. The information must be as specific as possible with regard to the particular flight and the severity of the threat. Air carriers must print the State Department hotline number on airline tickets. Also the number must be prominently displayed at airports.

Air carriers receiving threat information from the Secretary of Transportation must immediately inform the flight crews of potentially affected flights. It shall be lawful for an air carrier to take any retaliatory action against flight crew members who act to avoid threats. The Secretary shall have the authority to cancel flights if he determines that a serious and credible threat exists, and that cancellation is in the public interest.

We can only ensure that airline tragedies like Pan Am Flight 103 will never occur again by passing legislation dealing with aviation security threat notification in conjunction with added Federal funding for acceleration, delivery and research on state-of-the-art detection devices, matching of checked bags to passengers, banning of radio cassette devices, and use of better paid, trained and investigated baggage handlers and airport employees.

In closing, I and my family urge you to find answers to the many unanswered questions and to take effective legislative action in time to stop another airline disaster like Pan Am Flight 103. Thank you.

Mr. OBERSTAR. Thank you very, very much. Again, I'll reserve comments and questions until we've heard from Mr. Hudson.

Mr. Hudson?

Mr. HUDSON. Thank you, Mr. Chairman. I will be very brief.

Before I begin, I would just like to hand up approximately 1,000 letters that are addressed to you, which have been written and signed in the last week in my area. They call on you to hold this hearing, which you've so graciously done, and they also call on you to mandate the FAA for once and for all to institute stringent security measures, so that we will not have many more Flight 103s.

Ms. CUMMOCK. Additionally, I'm submitting 700 letters requesting that the Government provide U.S. citizens with the right to safe air travel by addressing these security issues.

Mr. OBERSTAR. Thank you. Those will be received and included.

Mr. HUDSON. Mr. Chairman, we've now been listening for over five hours, and I must say my brief comments that I will make, I bring some anger to this proceeding.

I lost a 16-year old daughter, who was a high school exchange student, on that flight. If any one of several of procedures had been in effect, I have no doubt in my mind that she would have never been on that flight. She would be alive today.

I think it's important, Mr. Chairman, we keep it clear as to the present status of airline security policies. This is the 90th day since Flight 103 was bombed. What has happened in those 90 days?

First, the warning policy. It's the same as it was. It has not changed. The policy has been reiterated by the State Department and the FAA is to keep warnings, even serious, credible threats, secret from the public, secret from the passengers, secret from the flight crews, the very people who are at risk.

There has been no move to ban the very devices which were used to hide the bomb that brought down 103. Incredibly, Mr. Chairman, three weeks ago at a Montreal Conference, the British Transport Minister recommended, before the World Press, that these devices be banned. He stated that we have no defense against plastic bombs placed in radio cassette recorders and other such electronic devices. The plastic is invisible to the present x-rays used, and the wiring cannot be distinguished. But incredibly no action was taken, except to say that this international body will meet again in June to consider it further, thereby alerting the terrorists, who we now know have these devices, that we are not going to proceed, that we are not going to take any action. I would submit that this goes on beyond negligence, beyond incompetence, and we are now in an area of incredibly reckless behavior.

There has been an exemption declared by FAA order of foreign carriers from any tighter security measures that were instituted since Flight 103 was bombed. Now the justification for that is that it might be uncomfortable or difficult if we were to try to enforce stricter security measures on foreign air carriers. But no attempt was made to do so. And in 1986, as I recall, when we had a problem in Athens, and a problem in Rome, just by issuing the fact that these airports were not in compliance with stricter American standards, and that Americans might be advised to be careful about visiting such airports, was enough to change their security procedures quite quickly. Why wasn't something like that done here?

Finally, the FAA has set forth a time frame of three to four years to close this security gap. That is the gap that has been created by our technology and procedures not keeping up with terrorists' technology and procedures. We cannot detect plastic bombs, as we now know, in checked luggage, with current security measures. Three to four years, Mr. Chairman. That is about how long it took us to win World War II. Do they really believe that the American people, do they believe that the victims' families are going to wait three or four years?

Mr. Chairman, in conclusion, I would just urge you and your committee to consider the support of three propositions. First, we are calling for a full Congressional investigation with respect to what happened to Flight 103. The inconsistencies have now transcended that, and they have become, in some cases discrepancies and actual cover-ups of how many warnings were issued, when were they issued, what security measures were or were not taken. We cannot rely on the FAA and the State Department to investigate themselves. In most air crashes there is no question that the Government agencies are not involved in what caused the crash, or in preventing it. It is due to pilot error, it is due to equipment failure, it is due to weather, other factors. We do not have the situation here.

Secondly, we would urge that you support a petition, which we filed today, that is the Victims' of Pan Am 103, which is an organization consisting of 300 American family members, to both tighten the security measures that are now so ineffective, on a short-term basis, not a three to four year time frame, and secondly to reform the warning or notice policy so that high-level threats are conveyed to the people who are really at risk, namely the people getting on the airplane. We believe it's simply immoral to say that a security officer sitting at a desk in Frankfurt or London, or Washington, is going to say whether a plane goes or stays. And if he makes a mistake, he is not the one to suffer; and to keep that information secret from the very people who's lives are at stake. We can have no confidence in the system which maintains this type of policy.

And thirdly, Mr. Chairman, we call on you and the committee to resolve this muddle of who is going to pay for TNA devices, which everyone apparently recognizes are needed to detect bombs.

I sat through a hearing last Tuesday before Senator Lautenberg for five or six hours, the same here today. You have the industry here, you have the FAA here, you have your committee, of course, representing the House of Representatives on this issue. Why can't we get some action? Why can't we get resolution of this? The highest figure that's been put out here is $150 million. That represents about 25 cents per ticket. This is absurd. I would call on you in the next week to try to resolve this issue. The industry indicated last Tuesday, they were amenable to cost sharing. You have talked about using the trust fund. The money is there. This is not a money issue. We look totally foolish to our allies and the rest of the world, when we muddle around for 15 to 20 cents per ticket. When 200 Americans were shot out of the sky in the largest attack in history by terrorists against American civilians.

And finally, Mr. Chairman, I would just urge you to break the pattern of inaction that has developed, and paralysis of our industry and of our Government in reaction to this disaster.

Thank you, sir.

Mr. Oberstar. Thank you very much, all three of you, for a very heartfelt, very powerful and compelling testimony that speaks to the depth of your loss, the depth of your concern, and more importantly, that speaks to a broader issue, as you have said it so well in your testimony, your action, the actions that others will take in this matter, cannot bring back the lives of your loved ones, but can prevent the loss of life for others. And that is the spirit in which you are here today. Surely to see justice done and questions answered and peace of soul regained.

I applaud you more for the broader concern that you have that the gaps in the security net that you have identified, and the problems of agency response to those who have lost loved ones in a tragedy, be closed for others who may at some future time tragically also befall the same fate. And I have great respect for your concern and for your appeal today.

Ms. Commock, we have discussed prior to this session, the concerns that you were very specific about in your testimony, questions of the State Department, and questions of the airline. You should know that while you may not have had satisfactory answers, and may not have, as you've said before, had even a satisfactory hearing, Ambassador McManaway has sat here through this entire testimony, has heard every word of it, and will receive a copy of your testimony, and the questions you've asked, all three of you, and we'll get answers. And the FAA have sat through and heard your entire testimony, and will have a copy of it and we'll see that those questions are answered, and we'll evaluate how accurate and how responsive they've been.

We don't mean to have this hearing and to let the matter drop, and go on our way. We mean to come to a resolution, as Mr. Hudson said, to have some action. I don't know that it can come in a week. I don't know that it can come in a month. But it's going to come, surely, as fast as all the combined resources of people on this committee can make it happen. Putting in place the detection devices, simply a matter of releasing money from the Aviation Trust Fund. The money is there, the tax has been paid. The tax has been paid for two purposes, to improve airports, both facilities and equipment, that is runways, parking, ramps, and the air traffic control equipment, and for the provision of security.

People who fly pay that tax. It was once two separate taxes, it's been combined into a single tax and it's been paid into a trust fund with the assurance and the compact of the Federal Government with the people of the United States, that the money would be used for that purpose. It hasn't been. And now, we're going to fall short of using the Aviation Trust Fund because money has been withheld, only 77 percent of the current cash flow in the current fiscal year will be spent for the purposes for which intended. And that means that under the law the tax will be cut to 50 percent next year, there'll be less money coming into the trust fund and less money paid out, and that reserve continue to be held. If $400 million more were released in this fiscal year, the money will continue to be paid in and the benefits enjoyed by the traveling public.

I think if we can prevail upon the Administration, and I've asked a question in the Budget Committee hearings, and I serve on the Budget Committee, both last year and again this year, it does not make one wit of difference for the deficit whether that money is paid out or withheld, except that withheld it covers up some $400 million of deficit, but paid out does not add to the deficit, because it is a part of the trust fund. So we need to find a way to increase the funding or to, as it has been suggested earlier, in the current fiscal year to find a way to reprogram funds and rededicate them to the uses and purposes addressed in your collective testimony.

Perhaps the most painful question asked by this panel, is that of pre-notification. We asked that question of the State Department, in response to or because of a statement in Ambassador McManaway's testimony, "If we have a specific and credible threat to civil aviation security which cannot be countered, we will strongly recommend to the air carrier that it cancel the threatened flight." They have never had specific and credible threat information to such a degree that caused the Department to recommend to a carrier that it cancel a threatened flight. And therefore, your situation was not even in that category. So something needs to be done——

Mr. HUDSON. Mr. Chairman, Mr. Chairman, Mr. Chairman——

Mr. OBERSTAR. Just a moment.

Something needs to be done about the way in which threats are evaluated, how seriously threats are taken, how fully the threat is investigated. Ambassador McManaway said that it was a coincidence, that the caller in the Helsinki instance had been known by authorities and had been identified as a hoax. But there were other indicators as well that we feel were not sufficiently evaluated ahead of time, and that we think our security agencies need to be more careful about. We think that the testimony today indicated, of course the FAA is not an intelligence gathering agency, it is one that responds to intelligence gathered by the other agencies of the

Federal Government. They need to be on perhaps higher alert and more careful alert. And those are matters that we shall pursue through this committee and in cooperation with others.

And now, Mr. Hudson.

Mr. **Hudson**. With all due respect, Mr. Chairman, to Ambassador McManaway, I for one cannot take his statements any longer at face value. Last Tuesday, I was at another hearing held by Senator Lautenberg's committee, and it was asked of Mr. Salazar, and I believe Mr. McManaway also, if there were any other threats or warnings issued, other than this one in early December that has been called a hoax by our Government now for two months. And the response was that there were none. Now we find out last Thursday, two days after that testimony that there were at least two others, one issued in late November by the FAA, which Pan Am admits they received, and another one issued on November 22nd by the British Transport Authority, and a third one on December 19th, which apparently was not received until mid-January by the airline.

There is a position that has been conveyed that the earlier threat of December 7th was a hoax. But when I asked the number two person at the FBI whether that person who committed this hoax had ever been arrested, or charged—because it is certainly a crime, even in Finland, to submit a warning or threat whether it be false or true—and the answer I was given is no, that person was never arrested or charged. And I asked if our officials, our FBI, our security officials, had interviewed this person. I, myself, Mr. Chairman, am a former criminal justice official with the State of New York for 10 years, and with all due respect, I cannot accept the bare assertion that this was a hoax without proof. And we have not seen any proof.

Mr. **Oberstar**. Neither have the members of this committee.

The gentleman from Iowa, Mr. Lightfoot.

Mr. **Lightfoot**. Thank you, Mr. Chairman, and in the interest of the hour growing late, I'll keep my questions short.

Ms. Cummock, you listed a series of suggestions that you'd like to see changed and applied to flights, unless I misread it, I didn't get a specificity in it. Are you talking strictly of international flights, or would you apply your suggestions to all flights, both domestic and international, or do you have a criteria there?

Ms. **Cummock**. I think that they should be both international and domestic. It's very hard for us to go to other countries and tell them how to run their airports and what to institute on our airlines when we're not even addressing our own security here.

The March issue of Life Magazine, I don't know if you're familiar with this, talks about the El Al security expert that went through American Airports and concluded that no airport is safe in the United States, with curbside check-in, that he could virtually buy a ticket on any airline, check on a bomb, and get in the next cab out. I don't think that the United States would have any credibility going and trying to enforce any policies and procedures internationally without first taking a good hard look at what the potential risks are domestically. There are terrorists in this country. I think that they're not going to go away, and that they will look for opportunities.

Mr. **Lightfoot**. One of the things that always concerns me about articles such as that in a free society, such as ours, is that article doesn't become a training manual for somebody that wants to do this kind of thing.

Ms. **Cummock**. Sir, with all due respect, I think they're about 50 yards ahead of us on all of this. I think this is a revelation for me and for the average citizen, but I think that these people for sure know what options are available to them, because it must be their full time job.

Mr. **Lightfoot**. So then you would, all the recommendations you made, you would apply that to domestic flights from here to Chicago, as well as from New York to Paris?

Ms. **Cummock**. Yes. And again, we reiterate that those are on—certain bits of my recommendations are on flights with bomb warnings. We're not asking you to do El Al search procedures on every flight that leaves the area.

Mr. **Hudson**. Mr. Lightfoot?

Mr. **Lightfoot**. Yes, Mr. Hudson.

Mr. **Hudson**. One clarification. With regard to the stop-gap measures contained in the written testimony, the organization is recommending that these be adopted on an immediate basis for international flights where they originate from the U.S., or other locations.

It's certainly true, we need to increase the security here as well as abroad, but the experts that we have talked to indicate that the highest threats, for the most part, are in certain foreign airports. And I believe some of that has been alluded to here.

Mr. **Lightfoot**. I appreciate your clarifying that for us.

Ms. Wolfe, you mentioned in your testimony that "x-ray devices which are on the market which can pick up the differences between inorganic materials and organic materials like plastics" are not being used. Could you, in the research you've done, be a little bit more specific on why you think that those devices are not being utilized?

Ms. **Wolfe**. I think because they don't have a 95 percent effectiveness like the TNA device. I saw a tape that was done by the manufacturer of the E-scan device, and this tape showed how it was used, and how it could pick up the plastic that was used in the explosive, which does turn brownish-orange. I think one of the problems with the device is that if sheets of plastic are too thin, which is how terrorists apparently place things in luggage, they can't be picked up by the device. However, there are people who say if you have trained operators who know what they're doing, that you can deal with this.

In the situation of Pan Am 103 there was so much explosive used, that the terrorist would have had to double up on some of those sheets, so this would have come through the machine. Maybe for a very small bomb, it would not be detected. However, a much smaller bomb would never have blown up the entire plane and caused the loss of all lives. There have been other international incidents where maybe one or two, or three lives were lost. And I'm not saying that those lives should not have been lost, or weren't valuable, but the fact is that a whole plane load of people would not have died if that bomb was detected using a device that can pick up plastics.

Mr. **Lightfoot**. Thank you very much. My time has expired, but we know this hasn't been the easiest thing for you folks to do, but we do appreciate your coming here today very much.

Mr. **Oberstar**. We do have a vote in progress on the House Floor. The Chair would recess for 15 minutes, and when we return we'll begin with the gentleman from Texas, Mr. Laughlin.

[Recess.]

Mr. **Oberstar**. The subcommittee will resume its sitting, with apologies for the longer interval than we anticipated on this vote.

Questions have been raised about the use of the Aviation Trust Fund for the purposes of security, and I think for the record it should be stated that the trust fund can and does pay for security devices owned by airports or owned by the FAA. Passenger screening devices are the responsibility of the airlines. And they are not now eligible for trust fund purposes. Originally the FAA did purchase some passenger screening devices for use by the airlines with Aviation Trust Fund monies, but that was just to test them and to get the program started. Since then, passenger screening devices are the principal responsibility of the airlines.

But the trust fund also supports FAA research and development on new and improved security devices, and those are important expenditures. The new security devices for screening of luggage that is carried as checked baggage are matters that should be eligible for funding by the trust fund, and for emplacement in foreign airports, matters that can be funded through State Department appropriations. And we will continue to pursue those matters appropriately.

Now, the Chair recognizes the gentleman from Pennsylvania, Mr. Kolter.

Mr. **Kolter**. Mr. Chairman, I missed so much of the testimony, I'll have to pass at this time.

Mr. **Oberstar**. Does the gentleman from Iowa have any further questions?

Mr. **Lightfoot**. No, Mr. Chairman, I think we've pretty well covered it. Again, we appreciate the testimony of the witnesses. I think they did an outstanding job presenting their case to us, and we certainly will take under consideration the recommendations you folks have made, and as the Chairman said earlier, try to push things along as rapidly as we can. That's probably the best promise we can make you at this point in time.

Thank you, Mr. Chairman.

Mr. **Oberstar**. We are going to bring together an intercommittee effort. Already representatives of the House Government Operations Committee have been sitting in on the hearings, professional staff of the Foreign Affairs Committee have sat in on our hearings, and you have already testified at the Foreign Affairs Committee and at the Senate Committee hearings, and I have talked with my counterpart in the Senate, Senator Wendell Ford, about security matters. And we're going to just make effort to bring together all the resources that we can bring to bear on this problem.

I think insofar as the matter of a full Congressional investigation, as you put it, that matter must await the complete report of internal investigations by the NTSB, and by the FAA, by the State Department. Those are all now reaching their final stages. I think we need to have the detailed documentation of the crash investigation by the responsible investigative authorities. No investigation by a committee of Congress, or committees of Congress, would be effective, useful or accurate without having that information ahead of time. But we are monitoring that information on a weekly basis, and we assure you that we're staying on top of those agencies to make sure that there is no delay. And we've also had meetings already with the aircraft manufacturer, Boeing, who have had their experts at the site and piecing together the destructive event and their information, not yet complete, but reaching completion, is going to be essential to answering many of the questions that you and others have raised. We shall not go without closing the circle, I assure you.

I've been awaiting the arrival of our colleague from Texas, Mr. Laughlin, and the Chair recognizes at this time, the gentleman from Texas.

Mr. LAUGHLIN. Thank you, Mr. Chairman.

I just want each of you to know that I admire your courage and your testimony today. I find it very compelling and I want to assure you I'll be working with this committee to find the answers to the questions you've raised.

Thank you very much, and I'm sorry you had to be here today.

Mr. HUDSON. Thank you.

Mr. OBERSTAR. May I ask the panel if you have any further comments or questions at this point?

Mr. HUDSON. I'd just like to commend you, Mr. Chairman, you and the committee, for your last statements, and we look forward to working with you in a prompt and in an appropriate manner to, as you say, close the circle.

Mr. OBERSTAR. I think the final words of Thornton Wilder would appropriately close this portion of our testimony in the Bridge of San Luis Rey: "But soon we shall die and all memory of those five will have left the earth, and we ourselves shall be loved for a while and forgotten. But the love will have been enough; all those impulses of love return to the love that made them. Even memory is not necessary for love. There is a land of the living and land of the dead and the bridge is love, the only survival, the only meaning." Your testimony is that bridge from your loved ones to the future, and to the result that we expect to come from your and our efforts. Thank you.

[The prepared statements of Ms. Cummock and Ms. Wolfe follow:]

# Prepared Statement
OF
M. VICTORIA CUMMOCK FOR
THE VICTIMS OF PAN AM FLIGHT 103

Before the House Sub-committee Aviation

March 21,1989

Today, March 21, marks three months after the destruction of Pan Am 103. I am here representing the families and friends of the American citizens who were murdered when Pan Am Flight 103, from Frankfurt/London to New York were obliterated by a brutal terrorist bomb. Nothing we can say or do can bring our loved ones back. But we are here because of what you can say and do as our legislators, to improve airport/airline security, can prevent this horrible part of airline history from repeating itself.

We believe that the 270 lives lost on Flight 103 could have been saved--
that this bombing could have been prevented. We believe that those who conclude that little or nothing can be done about terrorist attacks on airlines are grievously wrong, motivated by either:

- o Commercial Considerations.
- o Dereliction of Duty.
- o Efforts to conceal/tolerate inadequate efforts.

We speak in sorrow, and are motivated not by bitterness but by concern for all air travelers' lives that can still be saved. We are not experts on the cause and cure of terrorism or criminal behavior, but this needless tragedy that seared our lives, has required us to learn more about airline security than we ever wanted to know. We are shocked by what we have found. We are determined to obtain action, that can substantially reduce the prospects for countless more disasters like PA103.

Specifically, five problem areas require immediate action. These areas are pre-notification, detection, coordination, compensation and crisis management.

1. Pre-notification of passengers, baggage handlers and concerned governmental/airline offices of serious, high level threats to airline security is an imperative. The lack thereof is inexcusable. Only a small number of threats are deemed sufficiently serious each year by the FAA to be the subject of a high level security bulletin. Any airline that is the subject of such threat should be obligated to notify each passenger prior to boarding of the issuance of that FAA bulletin, permitting that passenger to choose whether or not to take that flight. Surely every American citizen deserves that freedom of choice, based on notice and information. The policy of so-called "selective notification" is contemptuous of human life, passenger interest and American legal traditions. Had the passengers of Pan Am 103 been informed, by the airline about the FAA bulletin, we believe many of them would not have boarded that plane and would be alive today.

In addition, every flight captain should be notified of all threats to his flight and must be required to sign off at the gate.

He must possess full authority to delay or cancel the flight if he feels that the security of his passengers cannot be guaranteed, without recourse from the airline. Safety, not sales, can be the only criterion.

2. More adequate detection equipment, personnel and procedures must be installed for every airport and every airline. This will require more money, from both governments and airlines; but the amount now spent per passenger is absurdly low and the current level (or, more accurately, current lack) of effective security measures is intolerable. For example, it has been known at least since 1986 that plastic bombs, in checked baggage could not be detected by existing systems and posed the single most serious terrorist threat to international travelers. FAA stated that new equipment to detect such bombs would be available in 1987. But such equipment had not been installed or even ordered on December 21, 1988; and it still has not been installed or ordered today. We must get priorities straight. The right to safe air travel must be provided by the U.S. government by instituting mandatory safety procedures and installing available plastic bomb detection equipment utilizing the $6 billion in the Aviation Trust Fund.

Airport security personnel are too often ill-paid, ill-trained, ill-qualified and uninformed. Their methods and procedures are too often inconsistent from one airline to the next and ill-considered at best. FAA security personnel are also insufficient in number and training. Surely there are no higher priorities in the appropriations process, than the saving of our citizens' lives.

3. More adequate coordination, communication and involvement among all agencies engaged in gathering intelligence and combating airline terrorism, including the Federal Aviation Administration, the State Department, the Central Intelligence Agency, the National Security Agency, the Federal Bureau of Investigation and airline and airport authorities, is essential to the prevention of terrorist attacks on airlines. Today, however, responsibility is taken by no one and decisions are made by virtually anyone. The FAA largely leaves all questions of implementation to mid-level and low-level airline employees who receive no clear guidelines from the FAA, and no carefully and consistently compiled and evaluated information.

4. More adequate compensation by way of damages to the families of victims of international airline disasters is the only way to prod the airlines into upgrading and maintaining their security systems, procedures and policies. The obviously outdated Warsaw Convention of 1929 now places an unrealistically low cap of $75,000 on the value of each passenger's life. As the Government of Italy has already advocated, this cap must be eliminated or drastically removed to protect the families of international flight victims. As it stands right now, a limit of $75,000 liability is not sufficient incentive to take necessary security measures to act in a responsible manner.

5. Mandatory crisis management policies and procedures must be instituted throughout the airline industry. Families must not be left to rely on the media as their only source of information during an air disaster. No matter what the reason for the air disaster, appoint one government agency to insure that:

1) Victims families are notified immediately of an air disaster.

2) Assign one liaison to each family who is authorized to proved/disseminate pertinent information on a daily bases, about the following areas:

- General crash information:
  - survivors
  - bodies
  - what happened
  - when
- Procedures:
  - documents needed to identify bodies
  - number of bodies found
  - number of bodies identified
  - time frame to identify bodies
  - procedure for return/receive body
  - condition of bodies (autopsy/embalming)
- Investigation:
  - inform who is in charge of investigation
  - what agencies will contact
  - what will be needed from victims' families
  - coordinate all investigating agencies to have access to the basic biographical information obtained from victims' families to minimize repetition and harassment.

- Personal Belongings:
  - what is the process involved in the return of personal belongings.
  - standardize the type of information/format needed to identify personal effects.

Pre-notification, detection, coordination, compensation and crisis management must be addressed now. But each of them takes time, and passenger safety must be protected in the interim. We therefore demand the FAA to enforce the following emergency stop-gap measures until the permanent measures discussed above are in place:

(a) All carry-on and checked baggage must be hand searched (until proper bomb detection equipment is in place); sealed as soon as the appropriate security checks have been completed; and matched with passengers. Any unattended or abandoned baggage must then be turned over to security personnel.

(b) The El-Al airline procedures of utilizing security personnel to question all passengers should be adopted by all airlines on at least a stop-gap basis.

(c) Late arriving passengers should either be denied entrance or subjected, regardless of possible flight delay, to the same screening processes as all other passengers.

(d) All un-accompanied luggage must be searched for explosives before allowing it on planes.

(e) Eliminate curbside check-in.

(f) Mark each bag after it has gone through security, making sure only bags that have been checked are loaded on to planes. Limit access to planes by airline/airport personnel once bags are checked.

(g) Assign special seats to suspicious passengers where flight crews and FAA sky marshalls can monitor them.

(h) Keep non-passengers out of domestic and international concourses.

(i) Isolate passengers on connecting flights coming from other airports, where security is weak requiring them to go through security check.

(j) Have one uniform security system for all airports and airlines, as opposed to different agencies working the same airport with little or no coordination.

(k) Raise the caliber and provide necessary training to security people. At minimum wage, you get what you pay for.

(l) An 800 number should be established with information on airline threats enabling ticketed passengers to contact the specific airline mentioned for details and to decide for themselves whether they want to take a particular flight.

(m) Ban electronic devices large enough to contain plastic explosives, of the type that destroyed PA103, until new plastic bomb detection monitors are installed.

No doubt these recommended interim procedures will involve cost, inconvenience and complaints. They will also save lives.

Finally, we urge this Committee to obtain a better sense of the confusion and cover-up that now characterize international airline security by investigating a particular case -- the case of Pan Am Flight 103. We have attached as an appendix to this statement a series of questions for which you will be able to obtain answers better than we can.

Those answers will not bring back our loved ones, massacred last December 21 at 31,000 feet. Neither will the remedial measures we have advocated here. But at least those measures and others like them can help to increase the safety of our airways. At least they can help to prevent other potential murderers from inflicting pain on more people, no doubt including air travelers like you an your families. If action is taken now that saves the lives of countless others, then the terrible tragedy of last December will have at least produced some small gain to offset the terrible loss we have suffered.

We are grateful for your consideration of our views and we are hopeful that you will take early action accordingly. We hope you concur and recommend a full congressional investigation in order to get both the Senate and House Committees to institute mandatory changes and provide necessary funds to change the current system in order to do everything in your power to avoid history from repeating itself.

M. Victoria Cummock

M. VICTORIA CUMMOCK
For the "Victims of Pan Am Flight 103

## APPENDIX

## UNANSWERED QUESTIONS REGARDING PAN AM FLIGHT 103

1. Was the flight half empty because some people had been warned? During the last five years, what has been the normal flight load on Pan Am 103 during the days immediately before Christmas?

2. What was the role of U.S. government agencies, State Department, FAA, CIA in selective notification of government employees of the bomb threat. Of those passengers who cancelled their reservations on Pan Am Flight 103 (list presumably obtainable from Pan Am), what was their reason for cancelling?

3. When Pan Am spokesman Jeff Kreindler told The New York Time (December 22, 1988) that "Pan Am had not received any threats," was he misinformed, uninformed or instructed to cover -up?

4. In weighing the seriousness of the December 5 warning about a Pan Am flight out of Frankfurt, did the FAA and Pan Am pay any attention to the discovery in West Germany only a few weeks earlier of extremists equipped with the same kind of explosives?

5. When the FAA conveyed its warning to London:

(a) Did the British Ministry of Transport inform the British Airport Authority, which is responsible for security at Heathrow?

(b) Did Pan Am's Head of Operations in London take "high alert" measures, as claimed; and, if so, what were they and to what departments and individuals was the threat communicated?

(c) What steps did Pan Am Corporate Security take?

6. Why did Mr. William Kelly of the U.S. Embassy staff in Moscow believe the warning sufficiently serious to be posted for Embassy personnel? Is this matter connected to his subsequent removal from the Embassy?

7. In view that this incident was the single largest act of terrorism against American citizens in the history of the United States, why were there no high level State Department officials in Lockerbie, that could provide basic information and answer questions from the victims' families ?

8. Why were there only four State Department representatives present at Lockerbie, who were limited to obtaining previous approval before providing any basic information/answers ? This pre-clearance procedure made them incapable of serving anyone's needs on a timely basis. (Unlike the English police, the Scottish government's social workers who were trained to assist/support, allowed to inform and show human concern).

9. Why did the State Department abdicate their authority to Pan Am by referring all questions to them? Callers were informed that their role was:

- Help conduct the investigation/but not disseminate any information.
- Help identify American bodies.
- Ensure American bodies were returned quickly.
- Ensure that all personal belongings were returned.

10. Why was there no emergency crisis center in the United States created to assist/officially inform families, on a daily basis, about the following areas of concern:

General Procedures/Basic Information

- Number of bodies found; documents needed to I.D bodies; number of bodies I.D. to-date; average time frame to I.D. bodies; procedures for returning/receiving bodies; condition of bodies (i.e. autopsy/embalmed)

Crash Information

- Why didn't the State Department call the families to inform them that the explosion was a terrorist bomb ?
- Why was the media the first and only source to inform the *general public* of the bomb ?
- Why do the families have to rely on the media for all their information ?

Investigation

- Why didn't the State Department inform the victims' families that several U.S. government agencies had jurisdiction to investigate this incident, and that they would be contacting us ? (i.e. State Department, F.B.I.,C.I.A.,N.S.T.B., etc.)

- Why don't all the investigating agencies share/have access to basic biographical information obtained from the victims' families, in order to minimize repetition/harassment of these families at a time of great stress ?

Personal Belongings

- What was the role of the State Department regarding personal belongings ?

- Why did it take the State Department over 5 weeks for the first written communication to be sent ?

- Why hasn't the State Department moved the process along and help victims' relatives get belongings sooner ?

11. Why did the lack of action/cooperation from the State Department and other government agencies require us, as citizens, to form the "Victims of Pan Am 103" support organization?

12. Why was the State Department reluctant to initially send out letters from "Victims of Pan Am 103" to join and organize?

# STATEMENT OF ROSEMARY WOLFE

BEFORE THE

SUBCOMMITTEE ON AVIATION

HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

MARCH 21, 1989

My name is Rosemary Wolfe. My 20-year old stepdaughter Miriam Luby Wolfe, a student of musical theatre at Syracuse, was a victim aboard Pan Am Flight 103. I thank the Chairman and members for calling this hearing and appreciate the opportunity to appear before you today-- on this the three-month anniversary of the bombing.

Just a few days ago, as I was getting ready to prepare this testimony, my family learned that the only two of Miriam's personal effects to have been identified so far are a watch and one earing. She liked to collect jewlrey that had the masks of the muses of comedy and tragedy. As it turned out, the earing she was found still wearing was the muse of tragedy. This was a a chilling and startling reminder that the legacy of Pan Am Flight 103 is that it could happen again-- that we take immediate steps to ensure that security and warning systems are improved and implemented in enough time to stop another disaster.

This must involve not only the airlines, which have the responsiblity for establishing and carrying out security operations, but also FAA, which regulates airline security, the Department of Transportation, which oversees FAA, the State Department, which manages our policy, and the Congress-- the watchdog of new legislation.

My family has many unanswered questions about how the tragedy could have been averted and why it was not. "Why weren't the passengers and their families warned? Why didn't airline security detect the bomb?" We now know that, prior to the bombing of Flight 103, FAA issued two security bulletins that alerted Pan Am and other U.S. airlines abroad about bomb threat dangers-- one on November 18 about a bomb contained in a Toshiba "Bombeat 453" radio which had been seized by West German police in an antiterrorist raid in Frankfurt and one on December 7 relating that a caller to the State Department in Helsinki said that a bombing attempt would be made before Christmas aboard a Pan Am plane traveling from Frankfurt to the United States. These two FAA Security Bulletins were reportedly two of only 27 Security Bulletins issued by FAA last year-- there were reportedly hundreds of warnings related to air travel but only 27 were considered important enough to achieve the high level status of security bulletins.

What did the the airlines, FAA, and the State Department do with this information? Why didn't they make a connection between the two bulletins and ensure that strict security was enforced when Frankfurt was involved in both bulletins? Why weren't pilots, who are on board security officers and flight crews not informed of the security bulletins? Were Pan Am crews even told about the November 4 FAA Security Bulletin we just learned about yesterday which cautioned U.S. carriers operating in Europe about a possible hijacking? Given the high-level warnings in the November 18 and December 7 FAA bulletins, did Pan Am airport staff x-ray checked luggage originating at Frankfurt and Heathrow and coming into Frankfurt from other airports for radio-cassettes? Why wasn't checked luggage matched to passengers? What efforts were made to question people? Were any Pan Am Flights, including Flight 103 on December 21, or any other U.S. airline flights orginating in Europe searched for bombs? Did FAA make any specific recommendations to the airlines on ways of increasing security after the two FAA Security bulletins on bomb threats were issued? We do not know if additional security measures were taken. We do know one thing— whatever measures were used, they were not good enough!

In light of the British announcement asking all carriers into their airports to assure that radio cassettes be removed and banned from luggage, we ask whether the Secretary of Transportation and FAA will make this a matter of policy for all U.S. carriers and airports?

We have unanswered questions about the high number of empty seats (some reports say over 160) on Pan Am Flight 103 on December 21 and Pan Am sales of half price tickets for the flight. According to some reports from travel agents, the flight was booked in October. If seats were cancelled, when were they cancelled, who cancelled them and why?

Looking beyond the two months preceeding the bombing of Flight 103, there are unanswered questions about the detection of plastic bombs and how FAA and the airlines dealt with this limitation. Since 1982, the U.S. government and airlines have known that security measures to protect U.S. airlines abroad were not adequate and that plastic bombs could go undetected. FAA did accelerate the its order of six Thermal Neutron Analysis Devices, which can effectively detect plastics, like Semtex, used in the bomb that destroyed Flight 103. However, what is difficult to understand is why FAA and the airlines, given their knowledge of inadquacies in plastic bomb detection, knowledge that TNA's would not be in use for some time, and of increasing threats from terrorists, did not require or put into widespread use x-ray devices which are on the market that can pick up the differences between inorganic materials and organic materials like plastics.

X-ray devices, known as E-scans, although they are not nearly as effective as TNA's, can pick up the presence of plastics, which show up as brownish orange. The complete cost of the device is about $60-65,000. Airlines also have the option of adding E-scan enhancers to existing black and white x-rays at a cost of only $20,000. E-scans are available and are being used on only a limted scale by U.S. airlines. Until TNA devices, can be introduced on a wide-scale, why aren't E-scans, given their low cost, being put into widespread use to detect plastics?

Regarding the TNA devices themselves, it has been estimated that U.S. airlines would need 66 units at some 45 airports at a cost of forty-eight and one-half million dollars. Congress can move forward to authorize special monies for the acceleration of TNA's and other devices on the market and for further research and development.

As legislators you are also in the position to pass special legislation, as introduced by Senator D'Amato last week, to set up a new system for aviation security threat notification. Senator D'Amato's bill provides:

1) The Secretary of Tansportation must set up a system to evaluate and grade the credibility and severity of threats against international aviation.

2) If the Secretary of Transportation determines that a credible threat exists, he must immediately notify the Secretary of State, affected air carriers, and airports.

3) The State Department must establish a 24-hour, toll-free consumer hotline to inform the public about credible threats. The information must be as specific as possible with regard to the particular flight and severity of the threat.

4) Air carriers must print the State Deparetment hotline number on airline tickets. Also, the number must be prominently displayed at airports.

5) Air carriers receiving threat information from the Secretary of Transportation must immediately inform the flight crews of potentially affected flights.

6) It shall be lawful for an air carrier to take any retaliatory action against flight crew members who act to avoid threats.

7) The Secretary shall have the authority to cancel flights if he determines that a serious and credible threat exists, and that cancellation is in the public interest.

We can only ensure that airline tragedies like Pan Am Flight 103 will never occur again by passing legislation dealing with aviation security threat notification in conjunction with added Federal funding for acceleration, delivery and research on state-of-the art detection devices, matching of checked bags to passengers, and use of better paid trained, and investigated baggage handlers and airport employees.

In closing, I and my family urge you to find answers to the many unanswered questions and take effective legislative action in time to stop another airline disaster like Pan Am Flight 103. Thankyou.

Mr. **Oberstar**. Our next panel consists of Mr. H.L. Bradley, Chairman of the Flight Security Committee of the Air Line Pilots Association; Ms. Juliette Lenoir, Vice President, Association of Flight Attendants, AFL–CIO, and Mr. Brian Moreau, Vice President, Independent Union of Flight Attendants.

We are very pleased to have the testimony of these professionals who daily put their lives on the line for safety and security. It's all too often overlooked that the principal role of flight attendants is security, and safety, and attending to the needs and to the good conduct of their passengers in time of emergency. And of course, the Air Line Pilots Association is and will always continue to be in the forefront of both airline safety and security.

I notice that we also have Mr. Matt Finucane, Safety Director for the Association of Flight Attendants, and we appreciate your participation here.

Ms. Lenoir, would you begin your testimony, please?

## TESTIMONY OF JULIETTE LENOIR, VICE PRESIDENT, ASSOCIATION OF FLIGHT ATTENDANTS, AFL–CIO, ACCOMPANIED BY MATT FINUCANE; H.L. BRADLEY, CHAIRMAN, FLIGHT SECURITY COMMITTEE, AIR LINE PILOTS ASSOCIATION; AND BRIAN MOREAU, VICE PRESIDENT, INDEPENDENT UNION OF FLIGHT ATTENDANTS

Ms. **Lenoir**. Certainly. Thank you, Mr. Chairman.

Chairman Oberstar, thank you for this opportunity to testify on the need for improved aviation safety. The Association of Flight Attendants' 24,000 members at 18 U.S. carriers must deal with security concerns on a daily basis. Many of our members have been on board when hijackings, attempted hijackings and bomb threat situations have been developed. Over the years we have worked closely with the FAA and the industry in developing and implementing a common strategy against attacks on aircraft and passengers. But much more needs to be done.

We have the following recommendations for improved safety: Flight attendants must be informed of threats that may jeopardize the safety and security of their flight. FAA regulations currently specify how a carrier must respond in the event of a security threat made against a specific carrier and flight number. However, these rules do not cover how a carrier must respond to a less specific threat, as in the case of Pan Am 103, and the rules leave it to the discretion of the airline, whether or not to inform the crew. This undermines the purpose of the Ground Security/Inflight Security Coordinator program which is designed to get important information to the crewmembers.

The FAA should develop a uniform protocol under which flight attendants will be alerted of a possible terrorist or hijack attempt. Upon receipt of this information the flight attendants can be particularly vigilant in their assessment of passenger behavior, carry-on baggage, bags left on board at through and termination stations, and ramp activity. We were recently pleased to hear that Senator Alfonse D'Amato is introducing legislation that would require transfer of security information to crewmembers, and we hope that similar legislation would be considered favorably by this committee.

There must be greater communication and coordination among Government agencies, both U.S. and foreign, concerning security threats and this information must be efficiently and promptly passed on to the airlines. Whether or not problems in the dissemination of threat information contributed to the disaster of Pan Am Flight 103, we must learn from any mistakes that were made and make sure they do not happen again.

Flight attendant security training must be improved. This training often consists of outdated, unrealistic and repetitive videotapes with little emphasis on terrorism. In addition, these courses rarely involve interaction with an instructor. Having a qualified instructor present who can answer questions would add significantly to the effectiveness of the training.

The FAA should require a full complement of flight attendants on board an aircraft during boarding at intermediate stops. The regulations presently allow for a reduction in the number of flight attendants during these periods. This could play into the hands of terrorists, hijackers and disturbed individuals.

The FAA should ensure that security screeners are motivated and adequately trained given their enormous responsibility to the traveling public. Security screeners are missing too many weapons, as recent FAA fines demonstrate.

The FAA should expedite the procurement of Thermal Neutron Analysis detection devices and other sophisticated technologies that detect plastic explosives. We find little comfort in knowing that in two years, only six TNA devices will be in place.

The FAA should promote the on-time implementation of computer card airport access systems which can cancel unauthorized cards. The agency should not fall prey to carriers' requests for extensions based on cost concerns.

We would also urge Congress, through closed-door hearings, if necessary, to reevaluate the current disparity between security here at home and security overseas. Are we really so safe here from terrorists? And what about the estranged spouse who want to blow up a plane to collect insurance? Has the FAA considered a passenger/baggage match program and x-ray analysis of all checked baggage, at least at all category X airports here in the United States?

We often hear aviation security professionals say it's just a matter of time before the United States is confronted with terrorism on its own soil. We were disturbed by the story of a purported Japanese Red Army terrorist who allegedly used a false passport to enter our country and remained for a month acquiring the raw materials necessary to construct bombs. According to news accounts, the alleged terrorist might have succeeded in his grisly task, had nit not been for a police officer who apprehended him for a minor violation and found three high explosive bombs in his automobile.

Let us not kid ourselves about what could happen here in the United States. Perhaps if we bit the bullet and instituted stricter security measures now, we would not be forced to implement El Al-type security in the U.S. after a domestic flight is tragically blown up.

We appreciate this opportunity to express our concerns to you, and we'll be happy to answer any questions the subcommittee may have.

Mr. **Oberstar**. Thank you very much for your testimony.

Mr. Bradley?

Mr. **Bradley**. I'm Captain Luke Bradley, Chairman of the Air Line Pilots Association's Flight Security Committee. Our president, Captain Duffy, would liked to have been here today, and fully intended to, however, he is occupied in other ways.

Mr. **Oberstar**. I think he probably has some other matters of pressing importance to—of perhaps momentary urgency.

Mr. **Bradley**. Yes, sir, at least.

I will summarize our testimony. We have submitted a full written testimony which we would like to have submitted for the record.

Mr. **Oberstar**. The Chair has already asked unanimous consent that all such statements appear in full in the record.

Mr. **Bradley**. Thank you, sir.

ALPA, which represents over 41,000 pilots who fly for 46 airlines, appreciates the invitation to share with you the pilots' perspective on the current state of security.

Today, I would like to address three aviation security subjects, airport access controls and security screening, direct notification to flight crews, and explosive detection technology.

Unfortunately, the aviation industry has demonstrated a propensity for waiting until after an accident occurs before taking action to correct known problems and then, often takes the wrong course of action or overreacts. PSA Flight 1771, and perhaps to a lesser degree, Pan Am Flight 103, were victims of this behavior. In both cases, the industry failed to address shortcomings in the aviation security system because of a mindset which says that it hasn't happened here yet, so we don't worry until it does. ALPA believes that passengers flying on U.S. aircraft deserve better protection than the safeguards which this attitude engenders.

What allowed the heinous crime to be committed on PSA Flight 1771 was a lack of control over employee identification. All evidence from the case points to the probability that this employee, who had been recently fired, still possessed identification which allowed him to bypass the security screening checkpoint. I'll come back to this point shortly.

Immediately after the downing of PSA Flight 1771, then-Secretary of Transportation Burnley issued an emergency directive prohibiting the bypass of screening checkpoints by airline employees, including flight crews. We believed then, and continue to believe, that this measure served no purpose other than to mislead the public into thinking that they were doing something.

In our estimation the screening of flight crews actually diminishes security by expending money, time, and effort on those employees who are the least likely to hijack an aircraft or maliciously harm their passengers. We would do better to commit our limited security resources to more productive measures.

Concerning the problem of improving airport access control, in early January of last year, we recommended to Secretary Burnley that the Department require installation of computerized access systems at airports. We were pleased to note that shortly after our recommendation the FAA issued a Notice of Proposed Rulemaking to amend Federal Aviation Regulation Part 107 to require certain airports to install these types of systems.

While we believe that the installation of advanced access controls will provide genuine benefits to security, the final rule on this issue, which became effective on February 8, 1989, is deeply flawed. Problems with the rule include the following: There is no requirement for the various computerized systems installed by airports to be compatible with each other or to share common technology; as the final rule is written, airport operators are not required to install card readers at screening checkpoints, thereby negating one of the most obvious benefits of this system. According to the airport organizations' calculations, the cost of the new system has been underestimated by the DOT and FAA by as much as a factor of three or maybe perhaps ten.

Even if the airports, airlines and the Federal Government find some way to overcome the problems of the final rule, we still will not realize the goal of improved access control at all of the effective airports until late 1992, at the very earliest. In the meantime, lax control over identification cards currently issued to airline employees will be perpetuated.

In order to address these deficiencies we recommend that the following actions be taken as expeditiously as possible.

One, require the FAA immediately to write a new standard for the issuance and control of existing identification cards by airports and air carriers.

Two, once the new standard is fully implemented, remove the prohibition on bypass procedures for uniformed, properly identified flight crews and other airline employees.

Three, create a permanent, high-level government/industry task force on aviation security to address the access control rule and provide future recommendations to the Transportation Secretary and FAA Administrator.

The primary use of the threat information disseminated by FAA involves a program which utilizes air carrier employees to assume the role and responsibility of ground security coordinators or GSCs. GSCs are responsible for ascertaining that the threat information received by the airline's corporate or flight operations executives is provided to and used by the flight crews and ground crews working a particular flight. Unfortunately, not all GSCs are receiving the information, or the intelligence, or other information provided by the FAA to the carriers.

A companion measure to the GSCs' efforts is the Inflight Security Coordinator program, the role and duties of which are assumed by the captain. ISCs are responsible for utilizing the threat or security information received by the GSCs. Unfortunately, the ISC program has not been formerly presented to all captains and the FAA has not yet completely developed or released a training program, which it possesses for this purpose.

In order to resolve these problems, we recommend that FAA make all Part 108 air carriers responsible for determining that GSCs are provided whatever threat information is available for each flight; create guidelines for the air lines to follow, which will ensure that threat information and any pertinent intelligence is being properly channeled to each flight and all who are involved in it; re-examine and adopt the ISC training program, or a variation thereof, which the FAA currently possesses. There must be an overall strategy prompted by good leadership, coordinated and communicated to all people in the system.

I would like to briefly share with you some thoughts on how we can improve our posture through the use of technology. The FAA is coordinating the development of new technology explosive detection devices which remove human subjectivity from the detection equation. We are encouraged by this effort and call on the FAA to continue to bring these new technologies to maturity and, further, to explore other types of technology which may be even more effective. In the interim, the Federal Government should encourage the industry to purchase currently available advance types of x-ray equipment, which while still dependent upon human judgement, are capable of detecting many types of explosive materials and those include the plastics.

The real solution to the terrorism problem is to have our Government, and our citizens, as well as the media and all other governments condemn these acts and immoral attacks on innocent civilians. We must all, then, take steps to pursue the perpetrators and see that the proper punishment is dispensed, as well as condemning those who would give sanctuary or support to them.

I thank you for the opportunity to present our viewpoints on some of the difficult security issues which face our industry and I will be pleased to answer your questions.

Mr. **Oberstar**. Thank you very much, Ms. Lenoir and Captain Bradley. We appreciate the careful thought that you have given to these important issues on behalf of your membership, who depend on you to represent their viewpoints in these proceedings. And we value your contribution very highly. You are on the front line of safety and security for the traveling public, and your firsthand experience and concern about these matters carry very great weight with the members of this committee, and with this Chairman.

I think the suggestion for ID cards updating is something that ought to have been done already by the FAA. I'm surprised they haven't acted on it. And we'll pursue that matter further. The bypass matter is something we'll inquire with the FAA about. It may not be something to be instituted immediately, but something that can be acted upon when ID cards have been updated, as you've suggested.

I think an ongoing task force that will continually review security with participation by Government, industry, pilots, flight attendants, is just good common sense. You can't put rules in place and then abandon them for dozens of years, as we seem to have done so often in the past. Measures need to be updated constantly to accommodate the growing threat, or the changing nature of threat to airline security.

I think the common theme that runs throughout the hearing and the testimony of witnesses is two-fold. Threat evaluation, detection of explosive devices that then lead up to the point that both of you have raised, notification, notification of airlines, of airline professionals, and of passengers. And the bottleneck in all of this seems to be threat evaluation. As I have listened carefully to this day of testimony and the comments of all the various witnesses, I keep coming back to the State Department testimony, "if we have a specific and credible threat to civil aviation security, which cannot be countered, we will strongly recommend to the air carrier that it cancel the threatened flight", but before they get to that point and the will is there, and the intention is good, but if the threat cannot be proved, then the action will not be taken, the promised action, expressed in all good faith and good will. That is something that I think, you know, we have to pursue further. And that's something, that's a matter I feel can only be dealt with in Executive Session, as it does involve coordination among the various security providers, and information and intelligence agencies of the Federal Government.

But, I'm getting ahead of myself. I didn't want to pass over Mr. Moreau, as I know you have a statement, and I want to receive your statement at this time.

Mr. **Moreau**. Good afternoon, Chairman Oberstar, committee members, ladies and gentlemen; my name is Brian Moreau. I am the vice president of the Independent Union of Flight Attendants, which represents the flight attendants employed by Pan Am.

Mr. Chairman, thank you for this opportunity to state our concerns and our recommendations.

International terrorism has been successful. Our flight attendants and our passengers are terrorized. We understand that statistically the chances of another 103 are remote, yet that fact is of little consolation in light of the grief we feel at the loss of our friends and co-workers. Most flight attendants know that not all terrorists can be stopped, but there is no escape from the fear that a 103 will happen again. There is little confidence in the system that created the web of miscommunication in the weeks prior to 103.

The busy summer season is almost here. Are we prepared? Have we done all that we can to protect ourselves? We don't think so. New rules and regulations have been issued in a steady stream since December 21st, and the air carriers are struggling to sort through the confusion and logistical nightmares these rules brought with them.

It's been three months to the day since the downing of Pan Am 103, and there is still no central, organized plan to pull all the concerned parties of the aviation industry together. In various forums, each segment of the industry has made recommendations indicating personal points of view. The bottom line seems to be, who will pay? Time is short supply and we urge that the first steps be taken to move forward. The FAA and the air carriers must determine what is needed for optimal security, and Congress must determine who will pay.

The remainder of our statement will be our recommendations.

Each American carrier drafts its own security program following broad-based FAA guidelines. The FAA then approves the program, oversees its implementation and monitors carrier compliance at home and abroad. This system generates a wide variety of security procedures, some more effective than others. To ensure consistency of performance and to maintain a high level of passenger and crew confidence, we recommend that the FAA create a master security program, using the procedures known to be most effective for all U.S. carriers. We also recommend that any increase in security personnel be utilized in the areas of most risk, Europe, the Middle East and the Far East.

We ask that the FAA expand the rule on background checks to include all air carrier employees with security sensitive duties, no matter where they work.

We recommend that the FAA, in conjunction with the airport operators and air carriers, develop sound training programs for airport security personnel. Across-the-board cost cutting measures have been implemented throughout the industry, and as a result the men and women directly responsible for passenger security, airport guards and x-ray screeners are often low paid and have high turnover rates. This high turnover rate means added expense for the training of new personnel and more supervision. An optimal level of expertise will probably never exist.

We ask that the FAA ensure adequate training of all security personnel, and we ask the industry to pay wages commensurate with the responsibilities of the task at hand.

Just as regulations implemented in haste and without forethought will not serve to enhance aviation security, technology alone will only provide a temporary barrier to a dedicated terrorist. The FAA's Thermal Neutron Analysis, TNA units, and the sniffers are indispensable, but the numbers needed for them to be effective won't be available until after this summer has come and gone. Right now we must concentrate on what is currently available. We must fine tune existing procedures and make sure that we hit the target 100 percent with the technology we have. We must also continue to promote development of the new technology which is less expensive and quicker to produce.

We were all put on notice with Pan Am 103. We can ill-afford another debacle like last December, and more revelations come to light daily. Several Government agencies are charged with the gathering, assessing and disseminating of vital information concerning threats to commercial aviation. There must be one conduit for amassing information by which the end user, the air carrier, receives all data in a timely manner, so they may respond. It is imperative that all Government agencies communicate and use mutually understood terminology.

Information once collected and evaluated, must reach those individuals with direct line responsibility for the safety of the aircraft, the flight crew, the cabin crew, ground handling agents and security personnel. Flight attendants must be informed of any and all threats received by the carrier. We must communicate. Flight attendants have a vested interest in the security of our aircraft.

The root cause of our problems exist in the realm of foreign policy, or the lack of it. We respectfully demand that the President and the Congress take a firm proactive stance against state-sponsored terrorism. The terrorist community must know there will be a heavy price to pay for any terrorist act against U.S. citizens.

Terrorism is a global problem that requires a global solution. We must continue a daily dialogue with the members of the International Civil Aviation Organization and the State Department must continue to work with foreign governments to ensure American carriers the ability to effectively implement security programs. Individual U.S. air carriers should not be forced to negotiate with foreign governments or airport authorities over the security of U.S. citizens.

And finally, in legislation we ask Congress to appropriate the money needed to fund the improvements in the U.S. security system. The Aviation Trust Fund has been used for that purpose in the past. Terrorism against U.S. citizens is an act of war, and as such is the responsibility of Government. We must never forget that Pan Am was not the target on December 21st, the target was the American flag on the aircraft's tail.

We ask that Congress create a multi-disciplined aviation security task force charged with the oversight of all facets of security; U.S. airports, foreign airports, air carriers, training, intelligence gathering and dissemination of information.

In closing, the brutal, premeditated murder of 270 human beings and the traumatization of an entire workforce dictates that we must quickly determine why the system failed; we must admit to and learn from our mistakes. We must work together, utilizing all available resources to ensure a renewed confidence in aviation and, most importantly, in our Government's ability to protect its citizens.

Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Moreau.

We appreciate your testimony, the recommendations that you have made. We take those to heart and we will do our best to act upon them.

The Chair recognizes the gentleman from Iowa, Mr. Lightfoot.

Mr. LIGHTFOOT. Thank you, Mr. Chairman. And once again, thank you for coming today.

I suspect that there's a great deal that we can gain from visiting with your folks in an Executive Session where we could talk about some things that really shouldn't be talked about publicly, and I think the Chairman, we've discussed that, that's something that certainly meets with the Chairman's approval, along with some of the other witnesses we've had today as well.

Briefly, though let me touch on another area rather quickly. I guess those of us that fly, whether we be you folks as part of the crew, or the flying public, we do things on an awful lot of trust. As a captain, you trust the mechanics that signed off a logbook, did the work accurately and correctly. You trust the people doing the weather—well, maybe not all the way, but you trust they've done it to the best of their ability. You trust the air traffic controllers. As a flight crew you basically trust those same things, in addition to the food service, and all the other things that you folks have to contend with, and as the flying public, we trust that all of you have not had a fight with your wife, or not into something you shouldn't be into, and that we get on the aircraft, we're going to have a safe flight. And 99.9 percent of the time it works that way, as it should.

But one area that is of growing concern to me on a personal basis, and I think it at least offers an opportunity for some problems—I fly roughly 2,500 miles a week on commercial airlines and another, it depends on the week, three to four, to five hours in general aviation aircraft—and when we get on a commercial plane, irregardless of what the gate attendants might say, and the flight attendants might say, the American traveling public many times is a pain where a pill won't reach, because they just don't pay any attention to what's told about the carry-on luggage and so on. I've many times sat on aircraft and wondered, what do these people leave at home. I mean, they carry literally everything onto the airplanes. And granted, all of that is screened through x-ray machines at our domestic airports. And I would assume that to someone bent on doing disaster that that might be the point that they would try to eliminate and go through the checked baggage route. But there's also a train of thought that people tend to overlook the obvious, and that might be the very point that they would try to come aboard with something that they shouldn't.

In lieu of what's been said today and your experience, do you feel that we're adequately screening that carry-on luggage, and number two, should it be minimized even further or maybe even completely eliminated?

Mr. Bradley. Is that for me, sir?

Mr. Lightfoot. Anybody that wants to answer. You're up front driving this bird.

Mr. Bradley. You guys got it all back there with you.

Mr. Lightfoot. She's got it all back with her trying to kick it under the seat. The guy insists that it's supposed to fit, but it's about that much too wide.

Ms. Lenoir. In terms of whether or not the carry-on baggage is adequately screened, my sense is that it's not, since it's been our experience through FAA reports, that the security screeners have missed weapons on test, when the weapons have gone through the screening devices.

We could certainly use some improved screening techniques, and probably more importantly, the screeners themselves could use more training. They could certainly use an elevated pay scale, because they are, in our opinion at least, the next to the last line of defense. We believe that we're the last line of defense in terms of your security onboard our aircraft.

Mr. Lightfoot. So you'd like to see more adequate screening? Would you eliminate carry-ons all together? And we won't publish your airlines.

Ms. Lenoir. Right.

We would reduce the amount of carry-on bags. We've attempted to effect that with the latest FAA ruling regarding carry-on baggage last year. Unfortunately, as you said, you wonder what passengers leave home. We have a sense of what we believe they leave home, but it certainly has nothing to do with their baggage.

We would certainly want markedly reduced numbers of carry-on bags in the aircraft. Not only for the security threat that they pose, but they pose a safety threat. You know, hurdling through the cabin at X miles per hour if that aircraft suddenly stops for some reason. They can be lethal weapons and have been lethal weapons, even on a stopped aircraft.

Mr. Lightfoot. Anyone else want to comment?

Mr. Bradley. I'd just like to comment on the fact that we've come a long way with the screening of carry-on baggage. I fully believe that we overburden the system with the more bags we have, the more passengers, the more we have going through that system, the least efficient it becomes.

I am the greatest offender in the world. I love to have my computer with me, and my this, that and the other. And I would be willing to make the sacrifice of leaving that all in the belly, certainly, to alleviate the problem that we have in the back. But I don't like to say that we don't have good screening, because we do have pretty good screening. It could use some improvement, but that can be done very quickly, I think.

Mr. **Lightfoot**. The plastics tend to offer a new twist to it from what we've had before.

Mr. **Bradley**. I think we can get to that a little later on probably.

Mr. **Lightfoot**. One other area that maybe I should have asked this of the airport operators when they were here, of concern, traveling as much as we do, going through the same airport over and over again, you eventually get used to who should or who normally is or is not in a gate area. And on a number of occasions I've spotted individuals that walked in off the street to find a warm place to hide. One individual that I watched about four or five weeks in a row that hung around a certain gate area, was basically pedaling jewelry that was hot, that was stolen. And we get into this funding thing that the Chairman mentioned earlier, that on the trust fund we're basically barred from buying this type of equipment for the airlines who now provide basically the gate security. Possibly if there was a master gate of some type, and of course, it's going to depend on the configuration of the airport, there might be a loophole where maybe Uncle Sam could help with some funding in that area, of some kind of master screening process before you get into the individual gates.

What do you think of the restriction of people only with tickets be in the gate area, and make sure they're legitimate tickets?

Mr. **Bradley**. I think that's—I'm very comfortable with that idea. The whole idea is to restrict as many unknowns from that aircraft area as you can. And if you have only those people with tickets in the gate area, and if you can control the people that get into that from one airplane to another, or from one carrier to another, you alleviate the problem considerably, as far as controlling access to that airplane.

Mr. **Lightfoot**. I won't divulge the location, but I've tried a couple of times, just for fun, to see if you could get past people that were supposedly checking tickets. And I've got an old ticket folder that's probably six months old that I keep in my pocket and the date is on it. No one has ever challenged me to look at it. They just see the corner of it, and they see the airline logo, and come on through.

I think Ms. Lenoir's comments were accurate, though. We certainly need to beef up the training and the level of the people that are in those security areas. I'm not trying to put them down. I don't mean it that way at all. But certainly additional training in that area would be of great value, I think.

Ms. **Lenoir**. Representative Lightfoot, this speaks to another issue that we brought up, which is the minimum crew compliment.

Currently, Federal Regulations permit, on intermediate stops, one-half of the aggregate number of flight attendants required onboard, less one, to be onboard the aircraft, and this poses serious safety and security problems.

Imagine, if you will, on a 727 with 200-some odd seats, one flight attendant onboard, which is a number that's permitted by the FAR, trying to observe whatever number of through passengers might exist; people getting on, getting off, passengers with questions or problems, or just who want to talk. It's very difficult then, to observe closely a passenger who might come back onboard, or may have never been onboard with some item, some carry-on item, leave the item onboard the aircraft, and then surreptitiously slip off, and leave the item there for you to deal with later on.

Mr. LIGHTFOOT. One final question. As flight crews, I'm sure at the time that we had a lot of the hijackings going on, these kinds of incidents always raise the awareness level, but are you trained in any way to identify the psychological characteristics, or the physiological characteristics that sometimes exist with individuals who are bent on destruction? That's a relative common thing in some law enforcement agencies to try to make their people aware of certain profiles, or certain things to look for in individuals that would come onboard the aircraft. Is any of that in any of your training, or not?

Ms. LENOIR. That's what the training personnel indicate to us. My sense is, and my feeling is that those who are seriously security trained, are the best judges of psychological profiles, if you will, of those who would want to do harm to their fellow passengers. And that's why we advocate improved training for flight attendants.

Mr. LIGHTFOOT. You have so many people to look at which goes back to your point about needing additional flight crew in place?

Ms. LENOIR. At least the full complement.

Mr. LIGHTFOOT. The full complement, yes.

Thank you very much. Thank you, Mr. Chairman.

Mr. OBERSTAR. The gentleman's time has expired.

The gentleman from Virginia?

Mr. PAYNE. No questions. Thank you, Mr. Chairman.

Mr. OBERSTAR. How seriously do you feel, Captain Bradley, the airlines take FAA Security Bulletins? What steps are taken when such bulletins are received? What action is taken? Who sees them? And who orders action to be taken?

Mr. BRADLEY. Name me an airline and I'll tell you a different story. There is no regulation beyond the fact making it available to the security, corporate security, or whatever security of the airline, there is no uniform directive about how that is handled from that point down. Each airline has its own system.

Mr. OBERSTAR. Do you think that so weighty a matter ought to be standardized——

Mr. BRADLEY. Absolutely.

Mr. OBERSTAR [continuing]. That there ought to be definitive procedures?

Mr. BRADLEY. Absolutely, sir.

Mr. OBERSTAR. Definitive personnel within the airline company, assigned to——

**Mr. Bradley.** Evaluation, it must be consistent, and what we object to with the handling of—we recognize the fact that intelligence is a great part of a security system. And we believe that that intelligence should get to the person who can use the intelligence. And we do not think that it should be—it goes back some years in the whole security mentality, that one gathers all this stuff, and it's top secret, so I'll just keep it in my pocket. And this mentality is what we believe should be changed so that the information gets out to the point where it can be best used. This might be to the Ground Security Coordinator, which the program is there, but it's not—it needs a lot of work on it.

**Mr. Oberstar.** Well, perhaps the Air Line Pilots Association and the flight attendants together, both unions, or all three, I should say, might want to reduce those thoughts to more detailed recommendation, which we will pursue further with the FAA. After all, you are on the front line of safety, and let us not forget that when Pan Am 103 went down, along with it went the crew.

I'd like to return just briefly, Ms. Lenoir, to the full complement issue on page 2 of your testimony. Is a change if FARs required, or is this company policy on reducing the crew complement?

**Mr. Finucane.** I could take that one. The FAA has interpreted the current regulation on crew complement in different ways. At one time they were interpreting the regulation to require a full crew during the boarding process, but then the airlines went to the FAA and got an informal exemption from the existing rule, which allows them to board the aircraft with just one flight attendant in many cases. And all it would take would be for the FAA to reinterpret its current regulation and you would have the full crew on during the boarding process.

So you wouldn't need a new rule, you just need a new interpretation.

**Mr. Oberstar.** Well, it certainly makes sense to me. I have often noticed one very frazzled flight attendant trying to catch all the passengers as they come through, all of whom are anxious to get to their seats, all of whom either just raced down the hall to the gate, or who just are tired and they want to flop in their seat, and they don't want to be hassled, and they rush past. But one person can't check everybody, when there are other duties that they are attending to at the same time. And so we'll pursue that matter further with the FAA.

And then finally, a matter of flight attendant security training. You characterize it as outdated, unrealistic, and repetitive video tapes. Not quite like the simulator training provided for so many other aspects of flight operations. Surely, in today's environment the matter of security can be upgraded.

**Ms. Lenoir.** I'm sure that's true. Unfortunately, I've been working for my carrier and then the flight attendants for over 15 years. And it's only been in the last five years or less that we've received significant security related training. It stems back, in our opinion, to the fact that for too long, carriers have looked at flight attendants as marketing tools, rather than the safety professionals that they are.

If there was a change in attitude, if you will, by the carriers that employ flight attendants, vis-a-vis their necessary security role onboard, my sense is that the training would be improved with the change in attitude.

Mr. **Oberstar**. We certainly shall pursue that matter further with the FAA. And of course, with the airlines themselves, but I think that's principally the responsibility of the FAA to follow through on this matter. I know that training is an essential component. And upgrading ones skills, an essential component of professional advancement, and it ought to be an essential part of the security role of flight attendants.

And I'm sure, Mr. Moreau, you would concur in that viewpoint?

Mr. **Moreau**. Yes, sir.

Mr. **Oberstar**. I want to thank the panel very much for your testimony and for your recommendations, which we shall include as we pursue in the very long, involved and complex matter of security.

I also want to mention, while you're here, that the subcommittee will, later this year, hold hearings on the matter of flight attendant duty time. I know it's a matter of great concern. Mr. Finucane has talked to us on a number of occasions about that matter, and we're very concerned about the increasingly long hours that flight attendants are required to spend without adequate break.

Ms. **Lenoir**. Thank you.

Mr. **Oberstar**. That, too, is a security, as well as a safety matter. Thank you very much.

Mr. **Moreau**. Thank you.

[The prepared statements of Ms. Lenoir, Mr. Bradley and Mr. Moreau follow:]

Before the House Subcommittee on Aviation
Committee on Public Works and Transportation

# Aviation Security

March 21, 1989

Testimony of
Juliette Lenoir, National Vice President
Association of Flight Attendants, AFL-CIO
Accompanied by Matthew H. Finucane
Director, Air Safety and Health

Chairman Oberstar, thank you for this opportunity to testify on the need for improved aviation security. The Association of Flight Attendants' 24,000 members at 18 U.S. carriers must deal with security concerns on a daily basis. Many of our members have been on board when hijackings, attempted hijackings, and bomb threat situations have developed. Over the years we have worked closely with the FAA and the industry in developing and implementing a "common strategy" against attacks on aircraft and passengers, but much more needs to be done.

We have the following recommendations for improved safety:

* Flight attendants must be informed of threats that may jeopardize the safety and security of their flight. FAA regulations currently specify how a carrier must respond in the event of a security threat made against a specific carrier and flight number. However, these rules do not cover how a carrier must respond to a less specific threat, as in the case of Pan Am 103, and the rules leave it to the discretion of the airline whether or not to inform the crew. This undermines the purpose of the Ground Security/Inflight Security Coordinator program (FAR 108.10) which is designed to get important information to the crewmembers.

The FAA should develop a uniform protocol under which flight attendants will be alerted of a possible terrorist or hijack attempt. Upon receipt of this information, the flight attendants can be particularly vigilant in their assessment of passenger behavior, carry-on baggage, bags left on board at through and termination stations, and ramp activity. We were recently pleased to hear that Senator Alfonse D'Amato is introducing legislation that would require transfer of crucial security information to crewmembers, and we hope that similar legislation would be considered favorably by this subcommittee.

* There must be greater communication and coordination among government agencies, both U.S. and foreign, concerning security threats and this information must be efficiently and promptly passed on to the airlines. Whether or not problems in the dissemination of threat information contributed to the disaster on Pan Am Flight 103, we must learn from any mistakes that were made and make sure they do not happen again.

* Flight attendant security training must be improved. This training often consists of outdated, unrealistic and repetitive videotapes with little emphasis on terrorism. In addition, these courses rarely involve interaction with an instructor. Having a qualified instructor present who can answer questions would add significantly to the effectiveness of the training.

* The FAA should require a full complement of flight attendants on board an aircraft during boarding at intermediate stops. The regulations presently allow for a reduction in the number of flight attendants during these periods. This could play

into the hands of terrorists, hijackers and disturbed individuals. For example, a 727 with 150 seats can be boarded at an intermediate stop with one flight attendant on board, instead of the normal three. That lone flight attendant simply cannot adequately monitor the entire aircraft for suspicious behavior, such as the passenger who boards, leaves a bag, and gets off the aircraft.

* The FAA should ensure that security screeners are motivated and adequately trained given their enormous responsibility to the travelling public. Security screeners are missing too many weapons, as recent FAA fines demonstrate. In one case reported by the Government Accounting Office, a screener did not identify a test weapon even though the screener had picked it up and visually inspected it. Training records revealed that the screener had, in fact, seen this particular test weapon during training. GAO has also found up to a 100% annual turnover in the workforce at some airports due to poor working conditions and wages.

* The FAA should expedite the procurement of Thermal Neutron Analysis detection devices and other sophisticated technologies that detect plastic explosives. We find little comfort in knowing that in two years, only six TNA devices will be in place.

* The FAA should promote the on-time implementation of computer card airport access systems which can cancel unauthorized cards. The agency should not fall prey to carriers' requests for extensions based on cost concerns.

We would also urge Congress, through closed-door hearings, if necessary, to reevaluate the current disparity between security here at home and security overseas. Are we really so safe here from terrorists? And what about the estranged spouse who wants to blow up a plane to collect insurance? Has the FAA considered a passenger/baggage match program and x-ray analysis of all checked baggage, at least at all category X airports here in the United States?

We often hear aviation security professionals say "it's just a matter of time" before the United States is confronted with terrorism on its own soil. We were disturbed by the story of a purported Japanese Red Army terrorist who allegedly used a false passport to enter our country and remained for a month acquiring the raw materials necessary to construct bombs. According to news accounts, the alleged terrorist might have succeeded in his grisly task had it not been for a police officer who apprehended him for a minor violation and found three high explosive bombs in his automobile.

Let us not kid ourselves about what could happen here in the U.S. Perhaps if we bit the bullet and instituted stricter security measures now, we would not be forced to implement "EL AL-type" security in the U.S. after a domestic flight is tragically blown up.

We appreciate this opportunity to express our concerns to you.

I would be happy to answer any questions the subcommittee may have.

STATEMENT

OF

H. L. BRADLEY, CHAIRMAN

FLIGHT SECURITY COMMITTEE

AIR LINE PILOTS ASSOCIATION

BEFORE THE

AVIATION SUBCOMMITTEE

HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

CIVIL AVIATION SECURITY

MARCH 21, 1989

I am Captain H. L. Bradley, Chairman of the Air Line Pilots Association's Flight Security Committee. ALPA, which represents over 41,000 pilots who fly for 46 airlines, appreciates the invitation to come before this subcommittee today to share with you the pilots' perspective on the current state of civil aviation security and our recommendations for continued improvements.

Today, I would like to address three distinct aviation security subjects, namely access controls at airports, threat notification to flight crews, and the need for new technology to detect explosive devices.

**Unfortunately, the aviation industry has demonstrated a propensity for waiting until an accident has occurred before taking action to correct known problems and then, all too often, either takes the wrong course of corrective action or overreacts PSA flight 1771 and, perhaps to a lesser extent, Pan Am flight 103 were victims of this behavior. In both cases, the industry failed to address shortcomings in the aviation security system because of a mindset which says that, "It hasn't happened here yet, so we won't worry about it until it does." ALPA believes that passengers flying on U.S. aircraft deserve better protection than the safeguards which this attitude engenders. Many lives depend upon the actions this august body and others will take within the next few weeks and months.**

## ACCESS CONTROLS AT AIRPORTS

The heinous crime committed on PSA flight 1771 has become a landmark event in the history of U.S. civil aviation security, and rightly so. It served to remind us that we are not, and never will be, immune to attacks on commercial aircraft, by either outside or inside operatives.

On this flight, a disgruntled USAir employee decided to end his employer's life and his own, and, in so doing, took the lives of the flight crew and passengers. What allowed this shameful act to be perpetrated was lack of controls over employee identification. All evidence from the case points to the probability that this suicidal employee, who had been recently relieved of his duties by his air carrier, still possessed identification which allowed him to bypass the security screening checkpoint. I will come back to this problem in a few minutes.

Immediately after the downing of PSA 1771, then-Secretary of Transportation Burnley issued an emergency directive prohibiting the bypass of screening checkpoints by airline employees, including flight crews. I informed Secretary Burnley that we would accept this measure only on an interim basis and denounced it as a political "Band-Aid." We believed then, and continue to believe, that this measure served no purpose other than to mislead the public into thinking that we were "doing something."

Please do not misunderstand. ALPA supports any and all measures which will genuinely improve the state of aviation security. In our estimation, however, the screening of flight crews actually diminishes security by expending money, time, and effort on employees who have never hijacked or maliciously attacked an aircraft or its passengers. The absence of any clearly defined threat or precedent coupled with, in many cases, a demeaning screening procedure (due to the high visibility of the pilot in uniform), is lowering the threshold of tolerance for screening on the part of many of our members. Since the implementation of airline employee screening, a number of pilots with otherwise sterling employment and civic records have been charged with civil disobedience and/or criminal charges. We know of pilots who have undergone strip searches, others who have been abusively pushed against walls and patted down, some have been arrested and at least one was jailed. These incidents have almost invariably occurred because of a lack of understanding on the parts of the screeners as to what constitutes proper screening and failure to remain within the constraints of professional behavior while fulfilling their duties. Instigating these altercations, in many instances, are quarrels with the flight crews over their carriage of tools of the trade (i.e., small tool kits which contain screwdrivers, flashlights, pocketknives, etc.) and pieces of metal which constitute part of their uniforms. Despite repeated communications of these problems to both the FAA and the carriers, the incidents continue unabated.

Further, our members do not fail to recognize the double standard inherent in the current screening procedures. Highly educated, professional pilots who must pass a battery of pre-employment psychological examinations are subjected to searches of their person and belongings; conversely, catering and aircraft service personnel who are regularly hired off the street with nothing more than a scant background check are subjected to no such screening and are given easy access to the aircraft which our members fly. Armed law enforcement officers, utilizing uniforms and identification -- as our pilots previously were allowed to do -- routinely bypass security checkpoints. We think it is critical that a re-evaluation of current flight crew screening procedures be made by the Department of Transportation, with an eye toward developing more effective ways of utilizing the limited resources we have to combat terrorism.

Concerning the problem of improving airport access control, in early January of last year, I recommended to Secretary Burnley that one effective measure to be taken would be installation of computerized access systems at airports. As we envisioned the system, airline employees would be issued identification cards which would allow them access to specified control points on those airports to which they travel. We were pleased to note that shortly after our recommendation, the FAA issued a Notice of Proposed Rulemaking to amend Federal Aviation Regulation Part 107 to require airports to install these types of systems.

While we continue to maintain that the installation of these systems will provide genuine benefits to security, the final rule on this issue, which became effective on February 8, 1989, is deeply flawed. Problems with the rule include the following:

1. There is no requirement for the various computerized systems installed by airports to be compatible with each other or to share common technology. While such an omission does not affect employees stationed at a particular airport, flight crews will be very inconvenienced by the necessity of carrying several different access cards for use at various airports.

2. At the time of our proposal, we had envisioned that one use of these systems would be to provide control at each access point, including the screening checkpoint. Once installed at these locations, we anticipated that the airline employee's identification card could be used to access the sterile concourse without the necessity of x-ray and magnetometer screening. As the final rule is written, airport operators are not required to install card readers at screening checkpoints, thereby negating one of the most obvious benefits of these systems.

3. According to the airport organizations' calculations, the cost of the new systems has been greatly underestimated. The Airport Operators Council International and the American Association of Airport Executives have informed us that the FAA's projected costs of $170 million for the affected airports over a 10-year period is underestimated by a factor of three or more. Additionally, the source of funding for the systems is unresolved

and no new federal funds have been allocated. A major source of concern to the airports, and one which is not addressed by the rule, is the fact that asbestos will need to be removed during the installation process at many airports. Asbestos removal is extremely expensive, time-consuming and disruptive to normal operations. The DOT/FAA's failure to even consider this problem was a major oversight.

In addition to these problems, FAA has not yet issued to the industry any guidance on how the airports' installation plans should be written, which access points should be equipped or how to select equipment. Neither has the agency addressed a myriad of other questions.

Even if the airports, airlines and the government find some way to overcome the enormous obstacles to installing the requisite computerized access controls under the timetable called for by the final rule, we still will not realize the goal of improved access control at all of the affected airports until late 1992 at the very earliest. In the meantime, we perpetuate lax control over identification cards currently issued to airline employees. While some airports and airlines have been very diligent in maintaining control over identification cards, they appear to be in the minority. We know of pilots whose identification cards are more than 20 years old and bear outdated, even erroneous information. Literally hundreds of identification cards are still possessed by non-valid card holders, including fired employees and those no longer working at an airport. The danger is, of course, that such pieces of identification could easily be used by the criminal element against the security of the aviation system.

**Recommendations**

In order to address the deficiencies I have described, we recommend that the following actions be taken as expeditiously as possible:

1. Require that the FAA immediately write a new standard for the issuance and control of identification cards by airports and air carriers. The criteria should include such items as: a mandatory expiration date of one year on all cards with a method of easily identifying those cards which have expired; a plain picture of the card holder; a means of accounting for 100 percent of all cards issued; a means of collecting all cards which are in the possession of card holders denied access; and, as appropriate, easily visible coding on cards (by color or some other means) which readily identifies the airport areas to which the card holder is allowed access; and, documentation and proof of compliance with this standard to the FAA. We anticipate that

many of the carriers and airports will have to do very little to comply with such a standard but there is a great need for uniformity in this area.

2. Once the new identification card standard is fully implemented, remove the prohibition on bypass procedures for flight crews and other uniformed airline employees. Using the previous combination of a uniform and valid identification card with positive card/card holder match, we are certain that security will not be diminished and will, in fact, be enhanced for the reasons I have previously stated.

3. Create a permanent, high-level government/industry task force on aviation security that utilizes the input of airline employees, air carriers and airports to provide a constant source of security information and viewpoints to the Transportation Secretary and FAA Administrator. The task force's first objective would be to completely review the final rule of the amendment to FAR Part 107 concerning access controls to: identify those airports which need to be covered by the rule; identify areas of financial and operational impact; establish realistic timetables; and, establish appropriate criteria to be met by both the system designer and federal evaluator. The effective date of the final rule would be suspended until such

time as the review has been completed and the rule amended to reflect the recommendations of the task force.

## NOTIFICATION OF THREAT INFORMATION TO FLIGHT CREWS

The lessons to be learned from Pan Am flight 103, like PSA flight 1771, involve addressing problems as they become apparent, not waiting until lives have been lost and a public outcry is heard.

Not all of the facts are yet in on the precise methodology used by the terrorists responsible for planting the explosive device on Pan Am 103. However, we can be fairly certain that the crew of the flight was not notified of any unusual security threat which could have prompted their taking extraordinary precautions to prevent the carriage of the explosive. It is not appropriate for ALPA to engage in a debate over what party or parties may have failed in their duties to inform the crew of an extraordinary threat if, in fact, positive threat information was known by the carrier or federal government prior to the flight of 103. What I prefer to address is improving the way in which threat information is collected by the FAA, disseminated to the carriers and further distributed to the operational level.

One of the FAA's major functions in security is to collect and distribute threat information which has the potential for affecting the safety of commercial aviation. This is accomplished by maintaining liaisons and obtaining information from various sources, such as the State Department and FBI at th federal level, and the state and local police at lower levels of government. The information received is analyzed, downgraded as appropriate prior to dissemination and sent to the air carriers for their use.

While we believe that the FAA generally does a good job of collecting and disseminating threat information, we have some strong concerns about the way in which the information received by the carriers, both from the FAA and outside sources, filters down to the operations level. There is an FAA-mandated program in place which uses air carrier employees to fulfill the role of Ground Security Coordinators (GSCs). GSCs are responsible for ascertaining that the threat information received by the airline's corporate or flight operations executives is provided to the flight and ground crews working a particular flight. They also make operational decisions based upon their knowledge of security and the specific threat. Unfortunately, this program has fallen into disarray. Few pilots can recall the last time that a GSC actually briefed them on the security status of a particular flight. Relatedly, not all GSCs are receiving the threat information provided by the FAA to the carriers. As we understand it, threat information sent by the FAA to the carriers' headquarters is not always received at the working level. Obviously, the GSCs cannot perform their duties to satisfaction if the information needed to perform the tasks is absent.

A companion measure to the GSCs' efforts is the Inflight Security Coordinator (ISC) program, the leadership role and duties of which are assumed by the captain. ISCs are responsible for utilizing the threat or security information received by the GSCs for briefing the crew and instigating additional measures to ensure the safety of the flight, such as making additional aircraft cavity inspections and securing the aircraft through other procedures. Unfortunately, the ISC program has never been fully implemented. In fact, some line captains have not yet received formal training for this function and, as a result, are not cognitive of their duties and responsibilities as the ISC. It is our understanding that an ISC training program was written and presented to the FAA but it has not yet been adopted by the agency.

## Recommendations

We recently informed FAA's Office of Civil Aviation Security of our concerns in this area. For the benefit of this subcommittee, I would like to share with you the recommendations that were made to that office.

1. Make all FAR Part 108 air carriers responsible for determining that GSCs are provided whatever threat information is available for each flight. Vital information received at the corporate level must be given to the GSCs in a timely fashion in order for the ISCs, flight crews and ground crews to take such preventive measures as may be necessary to ensure the safety of each flight.

2. Create guidelines for the air carriers to follow which will ensure that: all threat information received by them is being properly channeled to each flight; there is an active dialogue between the GSCs and ISCs, regardless of whether there is an active threat against the flight; and, there exists some means of determining and maintaining the effectiveness and consistency of the GSC program.

3. Re-examine and adopt the ISC training program, or a variation thereof, which the FAA currently possesses. Then, require air carriers to provide this training to the designated ISCs on both initial and recurrent bases.

## NEED FOR NEW TECHNOLOGY TO DETECT EXPLOSIVES

I would like to briefly share with you some thoughts on improving -- through the use of technology -- our posture against the threat of another explosion on a commercial aircraft. The FAA is coordinating the development of a variety of explosive detection equipment, a fact which seems to hold some promise for the future. For example, a Thermal Neutron Activation (TNA) device has been tested on 40,000 bags and has demonstrated an ability to detect all kinds of explosives with a 95 percent rate of accuracy. The FAA has ordered several of these devices and will no doubt order more in the future. Another type of device uses "sniffer" technology, whereby the air around passengers and bags can be sampled to detect minute traces of chemicals released by explosives. Neither of these devices is dependent on human subjectivity and therein lies their promise of better detection.

We are encouraged by both these types of new technology and call on the FAA to continue bringing them to maturity and, further, to explore other types of technology which may be even more effective. In the interim, the federal government must work to ensure that all current technology is brought to bear on the problem of explosive detection as soon as possible. There are now on the market some advanced types of x-ray equipment which, while still dependent upon human judgement, are capable of detecting many types of explosive materials, including plastics. We urge the federal government to assist the air carriers, as appropriate, in the purchase and installation of this equipment which can be an effective tool until such time as better technology becomes readily available.

In closing, I appreciate being afforded the opportunity to present our viewpoints on some of the difficult issues which face our industry in the light of the current security threat against aviation. I would be pleased to respond to any questions you may have.

Margaret W. Brennan, President
Brian K. Moreau, Vice President
Susan E. Nock, Secretary/Treasurer

# AVIATION SECURITY

TESTIMONY OF
BRIAN K. MOREAU, VICE PRESIDENT
INDEPENDENT UNION OF FLIGHT ATTENDANTS
BEFORE THE
AVIATION SUBCOMMITTEE OF THE
HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

MARCH 21, 1989

Good afternoon Chairman Oberstar, committee members, ladies and gentlemen; my name is Brian Moreau. I am the vice president of the Independent Union of Flight Attendants (IUFA) which represents the Flight Attendants employed by Pan American World Airways, Pan Am Shuttle and Pan Am Express.

Mr. Chairman, thank you for this opportunity to state our concerns and to put forward our recommendations concerning the state of aviation security.

International terrorism has been a huge success; our Flight Attendants and our passengers are afraid. We understand that statistically the chances of another 103 are remote yet that fact is of little consolation in light of the grief we feel at the loss of our 13 friends and co-workers. Most Flight Attendants know that not all terrorists can be stopped; there is no escape from the fear that it will happen again. There is little confidence in the system that created the web of miscommunication in the weeks prior to 103.

The busy summer season is almost here. Are we prepared? Have we done all that we can to protect ourselves? We don't think so. New rules and regulations have been issued in a steady stream since December 21st and the air carriers are struggling to sort through the confusion and logistical nightmares those rules brought with them.

It has been three months to the day since the downing of Pan Am 103... and there is still no central, organized plan to pull all concerned parties of the aviation industry together. In various forums, each segment of the industry has made recommendations indicating their personal points-of-view. The bottom line seems to be...who will pay? Time is in short supply and we urge that the first steps be taken to move forward: the FAA and the air carriers must determine what is needed for optimal security and the Congress must determine who will pay.

The remainder of our statement will address our observations and recommendations in five areas: regulations and oversight, technology, information, foreign policy and legislation.

## REGULATIONS AND OVERSIGHT

Each American carrier drafts its own security program following the broad-based FAA guidelines. The FAA then approves the program, oversees its implementation and monitors carrier compliance at home and abroad. This system generates a wide variety of security procedures, some more effective than others. To ensure consistency of performance and to maintain a high level of passenger and crew confidence, we recommend that the FAA create a master security program, using the procedures known to be most effective, for all U.S. carriers. We also recommend that any increase in security personnel be utilized in the areas of most risk: Europe, the Middle East and the Far East.

Pan Am, a predominately international carrier, must hire hundreds of employees abroad. For example, foreign national Flight Attendants are based in such diverse locations as Bombay, New Delhi, Nairobi, Istanbul and some Eastern Block countries. We don't know what, if any, background checks were made on these employees, yet they are fully trained in Pan Am's security procedures. We ask that the FAA expand the rule on background checks to include all air carrier employees with security sensitive duties, no matter where they work.

We recommend that the FAA, in conjunction with the airport operators and air carriers, develop sound training programs for airport security personnel. Across-the-board cost cutting measures have been implemented throughout the industry and as a result the men and women directly responsible for passenger security, airport guards and X-ray screeners, are often low paid and have a high turnover rate. This high turnover rate means added expense for the training of new personnel, more supervision and that an optimal level of expertise will probably never exist. We ask that the FAA ensure adequate training for all security personnel and we ask the industry to pay wages commensurate with the responsibility of the task at hand.

We support all measures being taken by the Department of Transportation to require foreign carriers, serving the U.S., to utilize U.S. security standards.

## TECHNOLOGY

Just as regulations implemented in haste and without forethought will not serve to enhance aviation security, technology alone will only provide a temporary barrier for the dedicated terrorist. The FAA's Thermal Neutron Analysis (TNA) units and the "sniffers" are indispensable but, the numbers needed for them to be effective won't be available until after this summer has come and gone. Right now we must concentrate on what is currently available; we must fine tune existing procedures and make sure we hit the target one hundred per cent with the technology we have. We must also continue to promote development of new technology which is less expensive and quicker to produce.

## INFORMATION

We were all put on notice with Pan Am 103. We can illafford another debacle like last December; and, more "revelations" come to light daily. Several government agencies are charged with the gathering, assessing and disseminating of vital information concerning threats to commercial aviation. There must be one conduit for amassing information by which the end user, the air carrier, receives all data, in a timely manner, so they may respond. It is imperative that all government agencies communicate and use mutually understood terminology.

Information, once collected and evaluated, must reach those individuals with direct line responsibility for the safety of the aircraft: the flight crew, the cabin crew, ground handling agents and security personnel. Flight Attendants must be informed of any and all threats received by the carrier. Flight Attendants have visual, if not actual, access to most secure areas. Also, existing security procedures mandate that the In-Flight Security Coordinator, the Captain, give a security briefing prior to each flight. We must communicate. Flight Attendants have a vested interest in the security of our aircraft.

## FOREIGN POLICY

The root cause of our problems exist in the realm of foreign policy, or the lack of it. We respectfully demand that the President and Congress take a firm, proactive stance against State sponsored terrorism. The terrorist community must know there will be a heavy price to pay for any terrorist act against U.S. citizens or property.

Terrorism is a global problem that requires a global solution. We must continue a daily dialogue with the members of the International Civil Aviation Organization (IACO) and the State Department must continue to work with foreign governments to ensure American carriers the ability to effectively implement their security programs. Individual U.S. carriers should not be forced to negotiate with foreign governments or airport authorities over the security of U.S. citizens.

## LEGISLATION

We ask Congress to appropriate the money needed to fund improvements in the U.S. security system. The Aviation Trust Fund has been used for this purpose in the past. Terrorism against U.S. citizens and property is an act of war and as such is the responsibility of government. We must never forget that Pan Am was not the target on December 21st, the target was the American flag.

We ask that Congress create a multi-disciplined aviation security task force charged with the oversight of all facets of security: U.S. airports, foreign airports, air carriers, training, intelligence gathering and the dissemination of information.

In closing, the brutal, premeditated murder of 270 human beings and the traumatization of an entire workforce dictates that we must quickly determine why the system failed; we must admit to and learn from our mistakes. Finally, we must work together, utilizing all available resources to ensure a renewed confidence in aviation and in our governments ability to protect its citizens.

Thank you.

Attachment

## CONFIDENCE IN AVIATION SECURITY DEMANDS:

1. A sound, consistent security program for all U.S. carriers,
2. Training to proficiency of ALL security and associated personnel,
3. Thorough and consistent FAA oversight,
4. A commonality of language and procedures for use among government agencies dealing in information gathering and risk assessment,
5. Communication,
6. The creation of a multi-discipline task force, with Congressional oversight, to deal with all facets of aviation security,
7. A reassessment of U.S. foreign policy: the President and Congress must take a firm proactive stance against State sponsored terrorism,
8. The release of monies from the Aviation Trust Fund for technology research and equipment installation at home and abroad,
9. That all air carrier personnel involved in the operational aspects of flight be fully informed of all threats, and
10. That we are all part of the solution and not part of the problem: WE ARE ALL RESPONSIBLE.

INDEPENDENT UNION OF FLIGHT ATTENDANTS
41 East 42nd Street, Suite 2300, New york, NY 10017

Mr. **Oberstar.** Our next panel consists of Dr. Hadi Bozorgmanesh, Corporate Vice President, Science Applications International Corporation; Dr. David H. Fine, Vice President of Thermedics. Mr. John Paderson, Marketing Manager for Ion Track Instrument, Incorporated.

I want to thank you very much for being so very patient throughout this very long day of hearings. Perhaps, in retrospect, it would have been better to break it into two days. We somehow thought we might be able to get it all packed into one day at a reasonable hour, but we think from the standpoint of continuity of information, it's better to continue to proceed through all of the facets of this issue. And we welcome you here and look forward to your testimony.

Dr. Bozorgmanesh, would you like to begin?

## TESTIMONY OF DR. HADI BOZORGMANESH, CORPORATE VICE PRESIDENT, SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC); DAVID H. FINE, VICE PRESIDENT, THERMEDICS, INC.; AND JOHN G. PADERSON, SALES AND MARKETING MANAGER, ION TRACK INSTRUMENTS (ITI)

Mr. **Bozorgmanesh.** Mr. Chairman, and members of the subcommittee, my name is Hadi Bozorgmanesh, and I am a corporate vice president of Science Applications International Corporation, an employee-owned company based in California. I appreciate the opportunity to appear before the subcommittee today to present to you SAIC's effort in research, development and demonstration of the Thermal Neutron Activation, commonly known as TNA, Explosive Detection System, and express our determination and capability to manufacture large quantities of TNA during the next 18 months.

First about SAIC and its employees. Employee owned and operated, SAIC is a diversified high-technology company focusing primarily in the areas of national security, energy, environment and health, and high technology products. Founded in 1969 by a small group of research scientists, SAIC has grown into an organization of more than 10,000 people with revenues in excess of $850 million. SAIC is truly a unique company, probably the only company of its size that is so thoroughly owned and controlled by the employees and so thoroughly dedicated to the national interest.

Mr. Chairman, for the past three and a half years SAIC has been Federal Aviation Administration's prime contractor to develop a practical way to detect explosives in airline luggage and cargo. In winning competitively the opportunity to work with the FAA to develop the TNA explosive detectors, SAIC committed to an aggressive but orderly program of research, development and demonstration culminating in a highly successful FAA-run tests of two prototypes at the Los Angeles and San Francisco airport from June of 1987 to March of 1988.

The science and technology of thermal neutron activation is neither very new nor very revolutionary. The application of TNA in a number of industrial and scientific arenas has been with us for decades. For example, in 1977 SAIC developed the first TNA unit for on-line analysis of the sulfur and BTU content of coal and other minerals. Today, products utilizing TNA are in routine operations coal, cement and other industries. What is exciting, however, is the tremendous advances in automated signal processing achieved through the FAA/SAIC collaboration leading to the development of a highly precise and rapid explosive detection system using the TNA technique.

Indeed the capability of the TNA to detect all types of civilian and military explosives with an extremely high degree of accuracy, better than 95 percent, and a low false alarm rate of less than four percent was demonstrated in over 40,000 tests performed by FAA in the Los Angeles and San Francisco airports with actual bags on a real-time basis. It should be emphasized that the system can be operated at close to 100 percent detection probability with a modest increase in the false alarm rate. Another noteworthy conclusion from the FAA test was that this high success rate was attained in finding minimal qualities of explosives, and the rate would be even higher in detecting larger amounts of explosive material. In addition, in all cases the operationally acceptable rate of 10 bags per minute was maintained.

Mr. Chairman, I'd like to clear some discussion that went on earlier about the rate of detection. The issue was that maybe these are slow. Six seconds per bag compares very well with four seconds per bag for x-rays. In other words the difference between the two techniques is about two seconds per bag. And this can even be further increased as we go on on the development of the actual systems.

I would also note that the EDS automatically alerts the operator in the event of a possible explosive, removing the problem of operator fatigue associated with the x-ray screening system.

In June of 1988, based on the remarkable performance of the two TNA prototypes, the FAA requested SAIC to build and deliver five TNA systems by mid 1990. Indeed, SAIC had learned much from the experience of the two prototypes and responded to the request with a smaller and more rugged design which is being implemented in the on-going construction.

The tragic destruction of Pan Am Flight 103 reminded us all of the vulnerability of our air carriers to acts of sabotage using the awesome destructive power of plastic explosives. Experts say that our present security equipment was not designed to detect plastic bombs and by-and-large is incapable of its detection with any significant degree of accuracy.

Immediately after this tragedy the FAA Administrator announced the agency's decision to order an additional TNA unit and expedite the delivery of all six units over six months. SAIC agreed to meet this challenge and build, test and deliver all six units beginning in June of 1989 and ending in January of 1990.

Mr. Chairman, SAIC is pleased to inform this committee that the construction of these units is well under way and is on schedule. The initial unit will be delivered and installed by June of this year at New York's JFK airport. SAIC will deliver the remainder of the six units at a rate of approximately one per month through 1989.

On January 9, 1989, in response to the Pan Am tragedy, SAIC presented to the Administrator of the FAA a plan that would commit SAIC to immediately mobilize its technical and financial resources to manufacture large quantities of TNA machines beginning at the onset of the calendar year 1990. To be more specific, SAIC proposed to invest in the necessary manpower and facilities to build TNA units at the rate of a minimum of 50 and as many as 100 per year beginning January, 1990. SAIC stipulated that, in order to meet such a schedule, there must be an indicated commitment by the Government and/or the Aviation Industry by June of 1989 to enhance airline security to meet the plastic explosive challenge. SAIC cannot commit the substantial resources necessary to build large quantities of TNA systems without adequate assurance of potential market.

Over the last several months, much has been heard about the need to use TNA technology for explosive detection. Testimony by the FAA and the DOT, who are thoroughly familiar with the performance and capability of these systems, have praised the ability of the TAN as the only reliable method for detection of plastic and other types of explosives. Virtually every organization concerned about secure air travel has testified about the immediate need for implementation of the TNA machines at national and international airports in order to protect U.S. carriers. We have heard discussions of various options for funding including a two dollar security surcharge; tapping the Aviation Trust Fund; direct appropriation; and a proposed rulemaking requiring the airlines to purchase.

SAIC does not claim the competence to recommend any of the above. However, in conclusion I would like to reiterate SAIC's readiness and commitment to mobilize all necessary resources at its disposal to build and install TNA systems in an expeditious manner in response to national policy and need.

Once again, I appreciate being afforded the opportunity to present SAIC's viewpoint in light of ~~the se~~curity threat against aviation. I would be pleased to respond to any questions you may have.

Mr. **Oberstar.** Thank you very much. Do you want to show the video now, or later?

Mr. **Bozorgmanesh.** It's at your pleasure, sir. It probably is better to show it now.

Mr. **Oberstar.** Why don't we do that right now, and then we'll proceed to the other testimony?

[Video presentation made.]

Mr. **Oberstar.** That certainly is a very graphic and powerful demonstration. As the video says, had it been in place, it would have been able to detect the explosive suspected of being used in the Pan Am situation.

Mr. **Bozorgmanesh.** Based on the information we have on the quantity, and the way that it was packaged, we could have easily detected it.

Mr. **Oberstar.** Are there means of packaging an explosive of this nature, whether they check Semtex or other similar explosives, are there ways of packaging them to camouflage the presence to your device?

Mr. **Bozorgmanesh.** Mr. Chairman, the beauty of this technology is that it is totally independent of how it's packaged and where it's hidden, because the neutrons are very penetrating, so are the characteristic gamma rays that come out, so you cannot really package it in a way that the neutrons will not reach them.

Mr. **Oberstar**. If it were packaged in lead, the lead would show up in and of itself, and would be an indicator that there's something amiss?

Mr. **Bozorgmanesh**. Well, the lead happens to be very transparent to neutrons, so that really is not a problem. They absorb x-rays, but neutrons is not a problem.

Mr. **Oberstar**. I see. Fine.

We'll have further questions later.

Dr. Fine?

Mr. **Fine**. My name is David Fine. I've vice president and leader of the sixty-man technical team at Thermedics, developing the new generation of FAA and Department of State explosives vapor detectors.

On behalf of Thermedics, I'm grateful to present this testimony to this panel on our current work. I'll summarize my statements and ask that the entire statement be placed on the record.

Mr. **Oberstar**. It will be included as already indicated earlier today.

Mr. **Fine**. In 1984 the FAA realized that because plastic explosives were increasingly being used by terrorists, there was a need to develop new advanced vapor detection technology, which would have the sensitivity to detect TNT and the plastic explosives directly. It was judged that the sensitivity of this advanced vapor technology would have to be improved by several orders of magnitude over the previous technology, from about one part in ten to the eleven, to one part in ten to the fourteen.

Let me put in perspective what one part in ten to the fourteen means. It means the equivalent of identifying one grain of sand on a beach 22 feet wide, six feet deep and one mile long.

Thermedics won the resulting competitive request for proposal, and in 1984 began to develop FAA's walk-in portal for screening airline passengers for explosives. Support from the FAA to date has totalled over $4 million. It was not known at the start of the project whether even a thousand-fold improvement would be sufficient.

The project was successful and led to the first prototype which was extensively tested at Thermedics in the summer of 1988, followed by a limited field trial under FAA sponsorship at Logan Airport with 2000 airline passengers. This test which took place in October of 1988 with a false alarm rate being about 0.05 percent. Although the sensitivity design goal was met and in fact exceeded, more work remains to be done than was originally anticipated. The entire project that remains could be completed on an accelerated basis at a cost of about $4.8 million over a fifteen-month period.

At the end of the Logan test, the phase of the walk-in portal project, the contract funding came to an end. We have been told informally that FAA has $600,000 available for this fiscal year, with a possibility of another $1.7 in Fiscal Year 1990. With this level of R&D funding, it would take three years after award of the continuing contract to complete the project, instead of the 15 months, which is possible. Meanwhile, there has been no activity on the development of FAA's passenger vapor screening system since the fall of 1988.

Thermedics won a second competitive contract from the FAA in the area of carry-on luggage. This seed project for half a million dollars was also successful, and it was shown possible, in principle, to construct an automated conveyor-based system for screening carry-on luggage for plastic explosives. The proposal was submitted to the FAA to engineer such a system in July of last year. Thermedics was advised informally, at that time, that it was unlikely that there would be further development of a carry-on system due to lack of R&D funds. A new proposal for carry-on luggage, with a much accelerated schedule, and costing about $4 million, was submitted following the Pan Am disaster. An interim research and development phase on this project for $300,000 was awarded last week to Thermedics.

There is a third Thermedics project in which FAA has an interest. This is the one funded by the Department of State. The Department of State has provided $6.8 million for the development of an EGIS, an advanced portable explosives vapor system. The EGIS is a flexible system and should be capable of assisting airport security in many screening applications within an airport. It was originally designed to detect explosives hidden in cars. The system is effective for screening checked or carry-on luggage for the presence of concealed plastic explosives. Also, the portable sampling probe allows security personnel to screen the plane itself including aircraft seats, lavatories, or hidden cavities for the presence of explosives. The test data on the Department of State system, and the theory of operation have been classified.

The Department of State's EGIS system has gone through four generations in the past four years; and the final equipment is now engineered for mass production. In fact, the first production are due to be delivered to the Department of State next week. Thermedics has the capacity to ship up to 75 machines this year, and up to 1,000 in 1990. The units will sell for about $124,000 each.

It must be appreciated that explosives detectors, and I mean all types of detectors, can never be foolproof. Each technology has significant weaknesses. These can depend on the weight of the explosive, the shape, the wrapping, how it is assembled, all these things impact on detection. However, x-ray, the new generation of vapor, the new TNA, all working together complement each other and should close each other's loopholes, and together offer significantly improved security.

In sum, with respect to EGIS, because of the foresight of the FAA and the Department of State in developing this new technology, it is now a ready-to-go system just about entering production. It will become available in quantities this year. If FAA and Thermedics receive the R&D funding, the portal screening system for airline passengers could also be available as a production unit in 1990. If funds can be found for the proposed development of the conveyor system for carry-on luggage, it too could be available by the end of 1990. These advanced vapor systems, together with other security equipment, would complete the explosives detection package and provide airports, for the first time, with an effective security net against terrorist bombings.

We urge this committee to ensure that in this time of budgetary cutbacks to meet the mandate of Gramm-Rudman, DOT and FAA be provided sufficient R&D funds to finish the high tech development which they so wisely began four years ago. There has been a breakthrough in explosives vapor detection technology. Give FAA the resources so that it can finish the job. No one would like to be here again soon, trying to explain to the families of new victims of possibly another terrorist attack, why we had failed to act.

Thank you. I have a short form on a video which will describe the equipment very well.

Mr. OBERSTAR. We'll show the video right now.

[Video presentation made.]

Mr. OBERSTAR. Is that the conclusion of the video?

Mr. FINE. That's the conclusion. Thank you.

Mr. OBERSTAR. Thank you very much, Dr. Fine.

Mr. Paderson?

Mr. PADERSON. Yes, Mr. Chairman, given the late hour, I'll summarize my remarks, and we have submitted a full statement to the committee.

First I'd like to thank you and the committee for the opportunity to come here today and talk to you about what we can do today to improve airline security and the safety of the passengers. My name is John Paderson, I'm the Sales and Marketing Manager for Ion Track Instruments. I've been involved in the development and application of security systems to protect against a variety of threats for the past 15 years, including bombings. I've asked to join me up here on the podium, Mr. Tony Jenkins, who's our Group Technical Director, and Mr. Jenkins is a noted authority in the area of explosives detection. Mr. Jenkins was one of the first scientists to develope a practical explosives detector, more than 20 years ago. Also with me today is Mr. Clint Seward, who's the President of our company.

As I said before, Mr. Jenkins developed the first explosive detector 20 years ago. Explosive detection isn't a new science. In fact, it's been a commercial industry for the past 20 years. Explosives Detectors are available today that will detect the plastic explosive of concern to all the to travelers today, Semtex. In every instance that Ion Track Instruments has had access to captured samples of Semtex, we've been able to detect them. That includes the bomb that was confiscated from the El Al flight in London.

It should also be noted that the Nuclear Power Industry in the United States is required by law to screen every person going into a nuclear plant for the presence of concealed explosives. Eighty percent of those plants use ITI explosive detectors to do that job. Our own Federal Government, including the U.S. Navy, the U.S. Department of Energy, and the U.S. Army all use ITI explosives detectors to protect their people and facilities. In fact, last year the U.S. Army made the largest purchase of explosive detectors ever in the history of the U.S. Government when they bought ITI explosive detectors to equip their EOD teams.

The airline industry today, faces a new threat. Mr. Chairman, earlier you mentioned that the threat has gone through two phases. You're absolutely right. In the past it was hijackings and the weapons were guns and knives. Today it's terrorists and criminals and their weapons are improvised explosive devices, bombs. Bombs are easy to make, easy to conceal, and once you place a bomb, they offer safety and anonymity to the perpetrator. The tragic losses of Pan Am 103, KAL 858, and Air India 182, coupled with the fact that there were 1,831 high explosive bombings in the U.S. between 1976 and 1985—that's right, 1,831 high explosive bombings in the U.S. Those two factors underscore the seriousness of the situation.

X-rays and metal detectors, which are currently in use were deployed to protect against the hijacking threat. The threat has changed, and what we need is new equipment to be able to counter that threat. Looking for a bomb in baggage without an explosives detector, is like looking for a gun or a knife in that same baggage without an x-ray machine.

Explosive detectors are available that can protect the traveling public, and have been available for a while. We brought with us an example of one. This is our portable explosives detector that we manufacture, and this is standard issue for the U.S. Army. All the EOD teams use this particular device.

[Showing explosives detector device.]

Mr. **Paderson**. It's called a Model 97, and it was recently tested, last month in fact, in conjunction with the FAA in Northwest Airlines at Boston's Logan Airport, to see how it could be integrated into the present security systems. The results, which we've summarized for you in Section 2 of this handout, show that you can take this type of device, integrate it into the current system, and not cause any delay into the processing of baggage or people. It also had a less than one percent false alarm rate during those tests. It weighs less than 30 pounds, costs a modest $12,000, detects in less than two second—that's right, detects in less than two seconds. And it's simple to use. It's detection capabilities are well known and well tested. Last year, in 1988, it was tested quite extensively at the FBI Academy during a week-long series of tests, and prior to that in 1987 it was tested at Baltimore-Washington International Airport, in a very extensive test using explosives in baggage.

We also have a walk-thru explosives detector which I'll ask Mr. Seward to hold up a picture of.

[Showing picture.]

Mr. **Paderson**. This is called our Model 85 and it's extensively used in the U.S. Nuclear Power Industry and the Houses of Parliament in London. The Houses of Parliament situation is very instructive in our discussions earlier, or the discussions that were had earlier concerning deterrents.

And I'd like to ask Mr. Jenkins to take but a minute here to just summarize what the experiences have been in the Houses of Parliament.

Mr. **Jenkins**. In the late 1970s Mr. Airy-Neeve, a member of the British Parliament, was murdered in the House of Commons by a bomb. This was the culmination of ten years of bombings in which the House had suffered, on average, two bombings a year. Shortly after that particular bombing we introduced explosive detection devices, like Model 85 here, into the House. They have not had one bombing, or one bombing incident since that day.

Mr. **Oberstar**. Thank you.

Mr. **Paderson**. It again demonstrates that the presence of explosive detectors will not only detect a terrorist, but will prevent the terrorist and deter him.

Mr. Chairman, the Model 85 searches 50,000 people a day in the United States alone, for concealed explosives. And it does so in less than six seconds for each person. We face a policy decision today, whether or not to deploy what's available to counter this new and deadly threat.

Deployment of today's technology doesn't eliminate the need for continued research. We're researching for the FAA, like our other panel members here. But likewise, continued R&D shouldn't delay deployment of what's available to protect the traveling public today.

The ATA has recommended approximately $17 million investment in explosive detectors and vapor detectors for the high risk airports. With equipment like we've just shown you, we can do that job in one-tenth the cost, or we can protect all U.S. carriers at all airports for the same price.

We also recommend increased funding for R&D so that new technologies like we have in our laboratory can be brought quickly to the forefront to counter tomorrow's threats.

In summary, the threat has changed from hijacking to bombings. ITI has the tools to do the job. What is needed is a policy decision to use today's tools. Number two, the funds to make it possible, and number three, increased funding for R&D.

Mr. Chairman, and members of the committee, thank you very much for your attention, and we stand ready to answer any of your questions.

Mr. **Oberstar**. This is a very graphic demonstration, very powerful testimony from all three groups of witnesses, and we really appreciate your presentation. I know it's been a long wait for you. It's been a long wait for us, as well. We wanted to have this testimony and wish we could have done it, perhaps, even earlier in the day. But it is a graphic demonstration and persuasive demonstration of what can be done when the mind of man, the scientific genius is applied to counter the terror that can be devised by other minds of other men for destructive purposes.

It appears to me that each of these technologies performs a different role. I would like to have your response as to how each of these devices could be used in such a way that they aren't overlapping and that they perform different security functions.

Mr. **Paderson**. Well, Mr. Chairman, with the portable explosive detector that we've shown you, you can quite easily search carry-on baggage. In fact, at Logan Airport, a couple of weeks ago, we searched 851 carry-on bags that were bound for domestic as well as international flights with less than a one percent false alarm rate, and also without delay in the system.

What you need is a continuous fast-acting detector in order to be able to handle the high flow of carry-on bags that you're going to encounter. And I would call your attention to the fact that that El Al bomb that was confiscated in Heathrow was in carry-on luggage. And it got through the x-ray system that was there and in place. So that that is a real weakness in the system that needs to be plugged. And we need to do something in the area of carry-on baggage.

Our devices can also be used to search checked baggage as well. And we did that as well at Logan Airport.

Mr. **Bozorgmanesh**. Mr. Chairman?

Mr. **Oberstar**. Dr. Bozorgmanesh.

Mr. **Bozorgmanesh**. The TNA device was developed for checking baggage, and all the tests were done for checked in bags. There is a smaller device that we are developing right now, which is really a transfer of the technology from the checked in bags, for carry-on. But all the tests, and the demonstration of the units were for the checked in bags, and we don't recommend it right now for either passengers or for carry-on bags.

Mr. **Oberstar**. Dr. Fine.

Mr. **Fine**. Each technology, as I mentioned in my statement, has it's weaknesses. I don't want to get into the specific weaknesses in an open session. Even the different vapor devices have their strengths and their weaknesses. It's a very different thing to be able to detect an explosive on a bench or on a block than when it's buried in a suitcase somewhere under a real test, under real conditions, on the fly with people not expecting the next suitcase to be a bomb. It's very different to come out of the lab into the real world and do that sort of double-blind testing with all the different technologies and see how well they really do.

We recognize that each approach, whether it be TNA, vapor, x-ray, even a hand search is not going to find all the bombs, all the time. Take a hand search, take a suitcase apart. If there's a bomb hidden in a radio, as there was in that Pan Am flight, they wouldn't have seen it.

Mr. **Paderson**. The other thing, Mr. Chairman, is that the technology that we've shown you is available today. That's one of the differences. We can do something today and not have to wait a year or two years.

Mr. **Oberstar**. Well, your point is well taken. I think it was made somewhere in the testimony that I have referred to in the safety issues that we have pursued with the FAA, and that is, all too often we find that the perfect becoming the enemy of the good. We have a good and tested and effective means of providing a desired objective, in this case security, and in other cases, safety, and wait and wait until the perfect device is found. Meanwhile, lives are often lost. I would like to see us move ahead, get these devices tested, see what are the limitations and work on them and deploy them as rapidly as possible.

Each of these technologies, though, it appears to me do not displace x-ray. X-ray has another purpose, detecting heavy metal in luggage or on person.

Mr. **Paderson**. Correct.

Mr. **Fine**. Yes, x-ray, for example if you took vapor detection, someone with a bomb in a suitcase, if it's a sealed bomb in a metal, like a hand grenade, the x-ray's going to find that, the vapor detector won't. The vapor detector can be used on people. You can use neutrons or x-rays on people, if there's a bomb hidden on your person.

And the comment you just made about the state of technology, where we are at, is we can pick up the explosives, including the plastics carried by people, but not under all conditions. If you go under enough layers of clothing, we're not at that point yet. We're close to that, but we're not there yet. It's that kind of progression in the technology that is still to come. We can do it at the rate of two to six passengers a minute, not the 10 that are required.

You can't use—again, the applications are very, very different.

**Mr. Oberstar.** Well, I think, again, we have to be aware of the limitations but move ahead with the technology. I find that in so many cases you deploy the available technology, the state-of-the-art technology and perfections come as you go through generations of equipment and we will find answers to those questions that you've raised.

The Chair recognizes, at this point, the gentleman from Iowa.

**Mr. Lightfoot.** Thank you, Mr. Chairman. And thank you gentlemen for your testimony this evening, I guess it is now.

I think the chairman pretty well covered any question that I might have as far as the technology is concerned, and I mentioned earlier on in the hearing that Iowa State University is starting to put together a non-destructive identification facility to do research in the areas that all you gentlemen are involved in.

Only one question, I guess, it's more of a judgment than anything else. But just the mere presence of any or all of the devices that you gentlemen are promoting, and the x-ray machine, how much of a deterrent is that? It's just the fact that somebody walks in and if they see somebody's looking, is that a deterrent in itself?

**Mr. Paderson.** The overt presence of additional detection, we believe strongly is a very real deterrent.

**Mr. Lightfoot.** Yes, Dr. Fine?

**Mr. Fine.** And we went through a test—in answer to that question, we went through a test at Kennedy Airport last year with the U.S. Customs Service looking for narcotics with a modification of the EGIS, and we were there for 10 days. On the first four days narcotics were found within the airport, one hit at a time. For the remaining six days there wasn't a single person caught with narcotics coming through Kennedy, for a six-day period. And the reason was there was this new piece of gear being switched from terminal to terminal. People didn't know what it was, and presumably the drugs were just diverted to some other location. So I think that is important.

**Mr. Bozorgmanesh.** I'd like to just make a point. In my judgment it is true that it is deterrent to the amateurs, but to the determined state-sponsored terrorism, it is not. And I think unless the systems truly detect explosives, it will not work.

**Mr. Lightfoot.** Thank you.

I come from a small town where the 7–11 closes at six, and I know one of the stores there put in a couple of dummy T.V. cameras, which effectively stopped the shoplifting. They didn't have enough money for the real ones, I guess. But it seems to work. It's the same idea of keeping—it's why police cars are plain black and white, so people know they're there.

Thank you, gentlemen, appreciate it. Thank you, Mr. Chairman.

**Mr. Oberstar.** Thank you.

The gentleman from Virginia.

Mr. **Payne**. Thank you, Mr. Chairman. I just had a couple of questions, too, if I may. And first I also wanted to thank you all for being here for such a long time and for staying to such a late hour. This is very helpful to us.

Regarding the SAIC proposal and specifically you mentioned that you have the ability to produce in these some quantity, 50 to 100, the TNA technology. We heard earlier today from Congressman McCurdy, who was speaking about that, that the initial copies would be roughly $750,000. Would these higher quantities cost correspondingly less as a result of the mass manufacture?

Mr. **Bozorgmanesh**. Well, the $750,000 was the number associated with the production of 50 to 100. We believe we can bring the cost down to close to $500,000 probably the year after, as we go into a larger production. But since this will be really the first mass production of these units, that's the cost, which is about $250,000 less than the six units that we are building for FAA per unit roughly. So we've already reduced the cost by about $250,000.

Mr. **Payne**. And future production, even at that quantity, likely will be less expensive because of what you'll learn, or you'll amortize your costs?

Mr. **Bozorgmanesh**. We amortize—actually it's not really the cost of research or the facility that we are amortizing. There is a great deal of equipment and sophisticated electronics that we have to purchase. And we are hoping as we build those ourselves, we reduce the cost, rather than buying it from others.

Mr. **Payne**. Mr. Paderson, the Model 85 that we're looking at here, does that detect plastic explosives?

Mr. **Paderson**. It detects a wide variety of explosives. I'd prefer not to go into the exact detection capabilities in an open session. It does detect more than a lot of people have said it could detect.

Mr. **Payne**. It is competitive with the machines that Dr. Fine's company produces?

Mr. **Paderson**. I'm sorry?

Mr. **Payne**. Is that competitive with the vapor technology that Dr. Fine was speaking of earlier?

Mr. **Paderson**. As far as we know we can detect with similar performance to what Dr. Fine's technology can do. We've not been privy to all the test results on Dr. Fine's though, and we can do it though in six seconds.

Mr. **Payne**. And the cost of that machine?

Mr. **Paderson**. The cost of that machine is $27,000.

Mr. **Payne**. Thank you, I have no other questions.

Mr. **Paderson**. Thank you.

Mr. **Oberstar**. Thank the gentleman.

I would like to ask the panel very briefly, do you feel that the FAA has spent enough, not enough, in the last five years or so on research and development to produce the technologies that we have today?

Mr. **Jenkins**. Mr. Chairman, can I answer that one, first? I am Research and Development Director at Ion Track, and this week I am laying off one of my research staff, because we've run out of funds on the projects we're working on on research.

**Mr. Bozorgmanesh.** The experience of SAIC has been on the development of TNAs that FAA has sponsored an adequate level to get the equipment to the point where it is now, and I think now we are calling it a product. There is a portable unit that we want to develop for actually moving it for many cases where there are actual threat called once the plane is in the air, you have to actually drive the system to the airplane and take the baggage in and sanitize it and put it back on the plane. And for that sort of R&D effort, and others which really leads into a more rapid and smaller type TNA, we've requested more R&D funding, and the response has been that they are very limited at the present.

**Mr. Oberstar.** Dr. Fine.

**Mr. Fine.** My response to that, up to the present, about the end of last year, there was adequate research funds. We're in a holding period right now. We have just gone under contract again this week on the luggage system. On the walk-in, there has been no activity at Thermedics, whatsoever since October. It is going to take at least 15 months to 36 months to complete that project. We haven't been able to start on that activity. I'm not sure if it's a lack of funds or a lack of, I think it's the bureaucracy in getting one phase of a contract started, as with any Federal agency starting on the next phase is a lot of red tape that you have to go through and it takes a long time to go those kind of problems.

**Mr. Oberstar.** Thank you.

I just have the feeling that if the FAA had been investing more money earlier, and therefore over a longer period of time, we would have brought such technologies on stream sooner. But we are where we are, and now the question is, will we proceed, the Government, industry, and all those who are affected, and responsible in the security area, spend the money to buy these units so that you can start up production and produce the available technology, the state-of-the-art technology and put it in place as soon as possible. You obviously have to have some expectation of a fairly sizeable production run to justify tooling up, producing the units, delivering them to the Government.

Yes, Dr. Fine.

**Mr. Fine.** Could I respond to Mr. Payne's last question to the person from Ion Track. It is our understanding that when FAA started the development of the walk-in portal, other equipment had been evaluated by the FAA, by the FBI. It is because of problems with that equipment at that time that they embarked on R&D programs. The FAA does not normally embark on R&D programs if there is existing commercial equipment. So I take exception to the answer that was given there.

**Mr. Oberstar.** Thank you very much.

**Mr. Paderson.** Mr. Chairman, there's just one thing, if I could respond to your earlier question about tooling up. There is an existing market for explosive detectors, as I've already talked about, with the U.S. military and the nuclear power industries. And in the case of ITI, the equipment is available from stock. It's not a question of tooling up. It's just a question of when do you need the equipment.

**Mr. Oberstar.** Well, it seems to me that at a minimum, we needed it last December.

Mr. **Seward**. We can give it to you tomorrow.

Mr. **Oberstar**. I thank you very much for your testimony. It's been most helpful, most enlightening, and we shall proceed further along the lines we've already discussed, of moving the huge apparatus of Government forward to put the technology in place necessary to protect lives.

Mr. **Paderson**. Thank you very much, Mr. Chairman, members.

[The prepared statements of Mr. Bozorgmanesh, Mr. Fine and Mr. Paderson follow:]

Science Applications International Corporation

STATEMENT

OF

**DR. HADI BOZORGMANESH**
**CORPORATE VICE PRESIDENT**

**SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC)**

CONCERNING

THE

# THERMAL NEUTRON ACTIVATION (TNA) EXPLOSIVE DETECTION SYSTEM (EDS)

BEFORE THE

**COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION**
**SUBCOMMITTEE ON AVIATION**

**THE U.S. HOUSE OF REPRESENTATIVES**

MARCH 21, 1989

SAIC

Mr. Chairman and members of the Subcommittee. My name is Hadi Bozorgmanesh and I am a Corporate Vice President of Science Applications International Corporation (SAIC), an employee owned company based in California. I appreciate the opportunity to appear before the Subcommittee today to present to you SAIC's effort in research, development and demonstration of the Thermal Neutron Activation (TNA) Explosive Detection System (EDS) and express our determination and capability to manufacture large quantities of TNA units during the next 18 months.

First about SAIC and its employees. Employee owned and operated, SAIC is a diversified high-technology company focusing primarily in the areas of national security, energy, environment and health, and high technology products. Founded in 1969 by a small group of research scientists, SAIC has grown into an organization of more than 10,000 people with revenues in excess of $850 million. SAIC is truly a unique company -- probably the only company of its size that is so thoroughly owned and controlled by the employees and so thoroughly dedicated to the national interest.

Mr. Chairman, for the past three and a half years SAIC has been the Federal Aviation Administration's prime contractor to develop a practical way to detect explosives in airline luggage and cargo. In winning competitively the opportunity to work with the FAA to develop the TNA explosive detector, SAIC committed to an aggressive but orderly program of research, development and demonstration culminating in highly successful FAA-run tests of two prototypes at the Los Angeles and San Francisco airports from June 1987 to March 1988.

Simply stated, thermal neutron analysis involves the process of probing, via neutrons, the characteristic elements of explosives, such as nitrogen, and detection and analysis of signature emission of these elements. The video will further describe the TNA process.

The science and technology of thermal neutron activation is neither very new nor very revolutionary. The application of TNA in a number of industrial and scientific arenas has been with us for decades. For example, in 1977 SAIC developed the first TNA unit for on-line analysis of the sulfur and BTU content of coal and other minerals. Today, products utilizing TNA are in routine operation in coal, cement and other industries. What is exciting, however, is the tremendous advances in automated signal processing achieved through the FAA/SAIC collaboration leading to the development of a highly precise and rapid explosive detection system using the TNA technique.

Indeed the capability of the TNA to detect all types of civilian and military explosives with an extremely high degree of accuracy (95 percent) and a low false alarm rate of less than 4 percent was demonstrated in over 40,000 tests performed by the FAA in the Los Angeles and San Francisco airports with actual bags on a real-time basis . It should be emphasized that the system can be operated at close to 100 percent detection probability with a modest increase in false alarm rate. Another noteworthy conclusion from the FAA test was that this high success rate was attained in finding minimal quantities of explosives, and the rate would be even higher in detecting larger amounts of explosive material. In addition, in all cases the operationally acceptable rate of 10 bags per minute was maintained. I would also note that the EDS automatically alerts the operator in the event of a possible explosive, removing the problem of operator fatigue associated with X-ray scanning systems.

In June of 1988, based on the remarkable performance of the two TNA prototypes, the FAA requested SAIC to build and deliver five TNA systems by mid 1990. Indeed SAIC had learned much from the experience of the two prototypes and responded to the request with a smaller and more rugged design which is being implemented in the on-going construction.

The tragic destruction of Pan Am Flight 103 reminded us all of the vulnerability of our air carriers to acts of sabotage using the awesome destructive power of plastic explosives. Experts say that our present security equipment was not designed to detect plastic bombs and by-and-large is incapable of its detection with any significant degree of accuracy.

Immediately after this tragedy the FAA Administrator announced the Agency's decision to order an additional TNA unit and expedite the delivery of all six units over six months. SAIC agreed to meet this challenge and build, test and deliver all six units beginning in June of 1989 and ending in January of 1990.

Mr. Chairman, SAIC is pleased to inform this committee that the construction of these units is well under way and on schedule. The initial unit will be delivered and installed by June of this year at New York's JFK airport. SAIC will deliver the remainder of the six units at a rate of approximately one per month through 1989.

On January 9, 1989, in response to the Pan Am tragedy, SAIC presented to the Administrator of the FAA a plan that would commit SAIC to immediately mobilize its technical and financial resources to manufacture large quantities of TNA machines beginning at the onset of calendar year 1990. To be more specific, SAIC proposed to invest in the necessary manpower and facilities to build TNA units at the rate of a minimum of 50 and as many as 100 per year beginning January 1990. SAIC stipulated that, in order to meet such a schedule, there must be an indicated commitment by the Government and/or the Aviation Industry by June of 1989 to enhance airline security to meet the plastic explosive challenge. SAIC cannot commit the substantial resources necessary to build large quantities of TNA systems without adequate assurance of a potential market.

Over the last several months, much has been heard about the need to use the TNA technology for explosive detection. Testimony by the FAA and the DOT, who are thoroughly familiar with the performance and capability of these systems, have praised the ability of the TNA as the only reliable method for detection of plastic and other types of explosives. Virtually every organization concerned about secure air travel has testified about the immediate need for implementation of the TNA machines at national and international airports in order to protect U.S. carriers. We have heard discussions of various options for funding including: a two dollar security surcharge; tapping the aviation trust fund; direct appropriation; and a proposed rule-making requiring the airlines to purchase.

SAIC does not claim the competence to recommend any one of the above. However, in conclusion I would like to reiterate SAIC's readiness and commitment to mobilize all necessary resources at its disposal to build and install TNA systems in an expeditious manner in response to national policy and need. Once again, I appreciate being afforded the opportunity to present SAIC's viewpoint in light of the security threat against aviation. I would be pleased to respond to any questions you have.

SUMMARY OF
Statement of
DAVID H. FINE
VICE PRESIDENT OF THERMEDICS, INC.
Before The
SUB-COMMITTEE ON AVIATION
HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
March 21, 1989

In concert with the Federal Aviation Administration and other federal agencies, Thermedics, Inc., of Woburn, Massachusetts, has devloped a new generation explosives detection system, based on a highly sensitive, vapor detection technology.

## Thermedics Vapor Detection Projects

O SecurScan: A walk-in explosives detection system for airline passengers.

- Funded by FAA
- Successfully field tested by FAA, October, 1988.
- Could be production ready by 1990

o Egis: A portable system, with hand held probe.

- Funded by State Department for Embassy security
- Economical
- In production; ready-to-go
- Recently tested by FAA for luggage

o Automated Conveyorized System: For carry-on luggage.

- Funded by FAA
- Completed successful feasibility study
- Thermedics proposal submitted
- Could be production-ready by 1990

# Statement Of
# DAVID H. FINE
# VICE PRESIDENT OF THERMEDICS, INC.
# Before The
# SUB-COMMITTEE ON AVIATION
# HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
# March 21, 1989

My name is David H. Fine. I am a vice-president of Thermedics, Inc. I have a Ph.D. degree in explosion chemistry from the University of Leeds in England. I have published over 100 research papers in refereed technical journals. I also hold 12 issued U.S. patents, and am an inventor on ten patents applications which are pending. The majority of my research has involved the detection of minute amounts of chemicals, including chemical carcinogens in foodstuffs and trace leaks of rocket fuels, and the detection of explosives. Over the past 15 years I have been the recipient, as principal investigator, of research contracts from the National Cancer Institute, Environmental Protection Agency, National Science Foundation, Air Force, Navy, Army, DARPA, Food and Drug Administration, Customs Service, Department of State, and the Federal Aviation Administration. I have served on three panels of the U.S. Academy of Sciences.

I am the leader of the technical team at Thermedics Inc., in the area of explosives and drug detection.

On behalf of Thermedics, I appreciate your invitation to present testimony to this panel on our current work with the FAA and other federal agencies on the development of new generation explosives detection technology.

In the early 1980's, Thermedics began its effort to develop the world's first instrument for use in identifying the type of explosive which had been used in a terrorist bombing. This equipment was used, for example, to help identify the explosives which had been used to destroy the Marine barracks in Lebanon. The equipment is now used routinely by the Federal Bureau of Investigation, the Bureau of Alcohol, Tobacco and Firearms, the Canadian Mounted Police, and their British, French, Italian and German counterparts.

Starting in the early 1980's, the Federal Bureau of Investigation, the Department of the Treasury, the Department of Energy, and the Federal Aviation Administration, tested the various explosives vapor detectors which were available commercially. They found that despite the optimistic claims of the various manufacturers, such detectors worked reasonably well for dynamite only. However, none of the vapor detectors were shown to be capable of detecting TNT or the plastic explosives. The equipment had been designed to detect the compound EGDN, which is found in dynamite, and which has a vapor pressure which is 100,000,000 (one hundred million) times greater than that of the plastics.

This commercially available equipment sometimes seemed to work for the plastics; it was shown that plastic explosive could be detected only if it had been stored near the dynamite and had thereby become contaminated by the EGDN in the dynamite. This contamination problem is well known today and is still the basis of all of the currently available explosives vapor detectors, apart from Thermedics'. Thus, the other instruments are effective only if the terrorist chooses to use dynamite or happens to have contaminated the explosives. We understand that the plastic bombs found by the Israelis and the British were not contaminated with EGDN.

In 1984, the Federal Aviation Administration realized that because plastic explosives were increasingly being used by terrorists, there was a need to develop new vapor detection technology, which would have the sensitivity to detect TNT and the plastic explosives directly. It was judged that the sensitivity of this new technology would have to be improved by several orders of magnitude over the previous vapor technology, from one part in $10^{11}$ to about one part in $10^{14}$.

Let me put in perspective what one part in $10^{14}$ means: it is the equivalent of one grain of sand on a beach 22 feet wide, 6 feet deep and 1 mile long.

Thermedics won the resulting competitive request for proposal, and in 1984 began to develop SecurScan™ walk in portal for screening airline passengers for a wide range of explosives, including plastics. The contract was funded by the FAA, through the Department of Transportation's Systems Center in Cambridge, Massachusetts. Support from the FAA to date has totalled over $4 million.

This successful project led to the first prototype, which was extensively tested at Thermedics in the summer of 1988, followed by a limited field trial with 2000 airline passengers at Logan Airport in October 1988. The test was successful, with the false alarm rate being 0.05%. The sensitivity design goal was met and exceeded.

The final phase funding plan has been submitted by Thermedics to DOT and FAA. The work includes the remaining research and development, increasing the throughput from 2 to 10 passengers per minute, increasing the sensitivity and range of operational usefulness and engineering the system for production. In addition, it was proposed that two pre-production units be built and tested by FAA at three different airports. The entire project could be completed at a cost of $4.8 million in as short a time frame as 15 months.

At the end of the Logan test, the SecurScan contract funding came to an end. The next phase remains to be planned and funded, and a formal contract negotiated. Various options are under consideration at DOT and FAA. We have been told informally that FAA has only $600,000 available for this fiscal year, with a possibility of another $1.7 million in FY1990. With this level of funding it would take 36 months to complete the project. At the present time, Thermedics is not currently under contract on this project to FAA or DOT, and is facing, as one might expect, its own internal budgetary decisions. There has been no activity on the project since the airport testing in the fall of 1988.

Thermedics won a second competitive contract from the FAA in the area of carry-on luggage. This "seed" project for $0.5 million was also successful, as it was shown possible, in principle, to construct an automated conveyor-based system for screening carry-on luggage for plastic explosives. A proposal to proceed with the engineering was submitted to the FAA in July 1988. Thermedics was advised informally at that time that it was unlikely that there would be further development due to lack of funding. Since the Pan Am crash, there has been renewed interest at the FAA Technical Center in the possible acceleration of the development of this hardware. A new proposal for carry-on luggage, with a much accelerated schedule, was submitted in February 1989. An interim research and development task on this project for $0.3 million has been negotiated, and may be awarded to Thermedics shortly. We understand that the FAA does not have the funds to proceed with the development of an automated screening system for carry-on luggage.

Regarding a third Thermedics project in which FAA has an interest, the Department of State has provided substantial funding for the development of the EGIS® portable explosives detector at Thermedics. Including the cost of the first three production units, this project has received $6.8 million of government funds. A primary function of the EGIS system is to detect car bombs, preventing them from being driven into an embassy. However, EGIS is a flexible system and should be capable of assisting airport security in many screening applications within an airport facility. The system is effective and well suited for use in screening checked or carry-on luggage for the presence of concealed plastic explosives. Also, the portable sampling probe allows security personnel to screen the plane itself including airplane seats, lavatories, or hidden compartments for the presence of explosives. There have been extensive field trials of this equipment, including operational use at embassies in Europe and South America. The test data, theory of operation, and certain documents relative to the program have been classified by the Department of State.

The EGIS system has gone through four generations in the past four years; the final equipment is now engineered for mass production. Production of the first three units is complete. The next production run of 10 units has just begun. Thermedics has the capacity to ship up to 75 units in 1989, and 1000 machines in 1990. The units will sell for about $124,000 and will be warranted for 12 months.

EGIS detectors could be deployed in significant numbers this year. The system is most suited for use at the check-in line, while passengers are waiting to check in for the flight. One or two systems, operating with multiple sample probes, would be capable of screening all the luggage for a large Jumbo jet, without causing delays.

By their very nature, the vapor detectors which have been designed at Thermedics are passive. They are unobtrusive. Also, they are relatively compact and low cost.

It must be appreciated that explosives detectors and other security related instrumentation can never be foolproof. However, X-ray, and the new generation of vapor and TNA technologies, all working together, complementing each other, could close each other's loopholes, and together offer significantly improved security.

In sum, with respect to EGIS, because of the foresight of the FAA and the Department of State in developing this new technology, it is a ready-to-go system now entering production. It will become available in quantities within the next several months. If the FAA and Thermedics receive the R & D funding, the SecurScan portal passenger screening system could be available, as a production unit, in late 1990. If funds can be found for the proposed conveyor system for carry-on luggage, it too could be available by the end of 1990. These systems, together with the other security equipment, would complete the explosives detection package and provide airports, for the first time, with an effective security net against terrorist bombings.

We urge this Committee to ensure that in this time of budgetary cutbacks to meet the mandates of Gramm-Rudman, DOT and FAA be provided sufficient funding to finish the high tech. development which they so wisely began four years ago. The technology is there: give FAA the resources so that it can finish the job. No one would like to be here again soon, trying to explain to the families of new victims of another terrorist bombing why we had failed to act.

**Ion Track Instruments, Inc.**
109 Terrace Hall Avenue
Burlington, Massachusetts 01803 U.S.A.
Telephone (617) 272-7233 Twx 7103321808
Facsimile (617) 273-3066

# STATEMENT

U.S. HOUSE OF REPRESENTATIVES, COMMITTEE ON
PUBLIC WORKS AND TRANSPORTATION, AVIATION SUBCOMMITTEE

TUESDAY, MARCH 21, 1989

DELIVERED BY

JOHN G. PADERSON
SALES AND MARKETING MANAGER

**ION TRACK INSTRUMENTS INC.**
**617-272-7233**

THEME

**"TODAY'S SOLUTIONS FOR TODAY'S PROBLEMS"**

Mr. Chairman, and Members of the Subcommittee: Thank you very much for the opportunity to appear before you to discuss what we can and should do today to make the travelling public more secure from bomb attack. Let me begin by introducing myself and my associate. I am **John Paderson**, Sales and Marketing Manager for ION TRACK INSTRUMENTS INC. During the past 15 years, I have been involved in the development and application of security systems to protect against a variety of threats, including bombings. Joining me today is **Mr. Anthony Jenkins**, who was one of the first scientists to develop a practical explosives detector and is a leading authority in the field. He is also, I am pleased to say, our Group Technical Director. It should be noted that Mr. Jenkins developed his first explosive detector almost 20 years ago at the request of the British Government in response to the Northern Ireland situation. Explosives detection is not a new science but has been a commercial industry for the past almost 20 years. ITI Explosives Detectors, in wide use today, could be helpful in detecting approximately 99% of the domestic high explosive threat and approximately 84% of the perceived international threat including **SEMTEX**. ITI Explosives Detectors daily search tens of thousands of people and packages in the U. S. alone.

The U. S. Nuclear Power Industry is required by Federal Law to search every person entering each facility for concealed explosives. 80% of those plants use ITI Walk Thru and Portable Explosives Detectors. Our own Federal Government, including the

U. S. Navy, the U.S. Army, and the U. S. Department of Energy, are using ITI Explosives Detectors because they perceive the threat to their organizations to be acute. The airline industry today finds itself in the same situation. In the past, the threat was hijackers. Their weapons were knives and guns. Now the new threat is terrorists and criminals and their preferred weapon is the improved explosive device. Bombs are easy to make, easy to conceal and once placed, afford the bomber a high degree of safety and security. The tragic losses of Pan Am Flight 103, Korean Air Flight 858, and Air India Flight 182, to other bomb attacks and the fact that there were 1,831 high explosive bombings in the U. S. between 1976 and 1985, underscores the urgency of the situation.

The x-ray machines and metal detectors currently in use were deployed to counter the hijacking threat. The threat has changed and the effectiveness of the system in meeting this new threat can be greatly improved by the use of commercially available explosives detectors. Looking for a bomb in baggage without an explosives detector is like looking for a gun or knife in that same baggage without an x-ray machine.

Commercially available explosives detectors such as this ITI Portable Instrument (Model 97), and this ITI Walk Thru instrument (Model 85), can significantly enhance the capabilities of what is currently in place. The ITI Portable Instrument (Model 97) was recently tested in cooperation with the FAA at Boston in Logan Airport. The results show that it can be integrated into the existing system without the addition of any delay and with **less than a 1 (one) % false alarm rate. It weighs less than 30 lbs., costs 1/3rd the price of an x-ray machine, is simple to use, and detects explosives in less than 2 seconds.** The detection capabilities of this instrument is well documented in tests conducted in 1987 at Baltimore Washington International Airport and at the FBI Academy in 1988.

The ITI Walk Thru Detector **(Model 85)** is widely used in the U. S. Nuclear Power Industry and protects the Houses of Parliament in London. It can process one person every 6 (six) seconds.

The decision facing the U. S. today is a policy, not a technical decision. The threat is so acute and the consequences so dreadful that we should enhance the capabilities of the current system now by the addition of commercially available instruments such as we have shown you here today.

Deployment of these or any similar instruments does not eliminate the need to continue R & D efforts to find an even better solution. In fact anything that can be done to accelerate new technologies should be done. But at the same time, the research into better solutions should not delay deployment of currently available instruments. Tomorrow's technology is important but our focus must be on what we can do today to enhance the system.

We strongly support the recommendation of the Air Transport Association that a special appropriation be made from the

Aviation Trust Fund for the acquisition of explosives detectors. The ATA's estimated $17,100,000 cost for vapor detectors is sufficient to deploy more than 1400 ITI Portable Explosive Detectors and could equip all U. S. carriers at high-threat airports abroad and at home.

We also recommend that R & D funding be expanded to speed up the progress. ION TRACK INSTRUMENTS INC., as an FAA Research Contractor, has new technology in the laboratory that shows every promise of detecting an even higher percentage of the threat.

In summary, the threat to the Air Transport Industry has changed from hijackings to bombings. Equipment is commercially available which has and will deter the terrorist bomber. What is needed today is:

a.) A policy decision to use today's tools,

b.) funds to make that possible, and

c.) increase funding for research.

iTi

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March 20, 1989

# FACTSHEET

1. Explosive devices (BOMBS) are TODAY the most alarming threats to the safety of the world's air travelers.

2. Recent events show a DANGEROUS INCREASING TREND in bombing incidents.

3. There are NO GOVERNMENT REQUIREMENTS for bomb detector devices in the U. S. air security program!

4. Yet, ITI bomb detectors have been protecting people FOR OVER 15 YEARS!!

5. Current users of ITI bomb detectors include:

   * 80% OF ALL U. S. NUCLEAR POWER PLANTS (15 YEARS)

   * U. S. ARMY (EOD) OPERATIONS WORLDWIDE

   * NASA, HOUSTON SPACE CENTER

   * U. S. NAVY SUBMARINE SERVICE

   * THE BRITISH PARLIAMENT (10 YEARS)

6. SEMTEX is believed to be the explosive substance (plastique) used in the bombing of Pan Am 103, as well as most other recent terrorist incidents.

7. ITI has successfully detected SEMTEX, the "terrorist's choice" explosive, in EVERY TEST conducted to date, a 100 % success rate with actual captured samples!

8. ITI's personnel and baggage detectors are:

   AVAILABLE / IN USE TODAY / COST-EFFECTIVE / HIGHLY RELIABLE

* * *

# ADVANCED BOMB AND WEAPONS DETECTION SYSTEMS

Crimes today are not just costly, they are deadly! Terrorists and other criminals now resort to weapons of destruction such as explosives to accomplish their objectives.

Since 1969 ITI Security has been on the forefront of technology to combat this emerging threat. It has pioneered the development of systems that can detect a bomb before it detonates and a weapon before it fires. ITI Security's expertise in designing entry screening systems has made it the leading supplier of such protection to the Nuclear Power Industry. ITI Security's Equipment is routinely used for the protection of sensitive government and commercial buildings, installations, and personnel throughout the world.

Each system is backed by a full program of training and support. In addition ITI Security provides comprehensive consulting services through a network of affiliated international experts.

**ITI Security**

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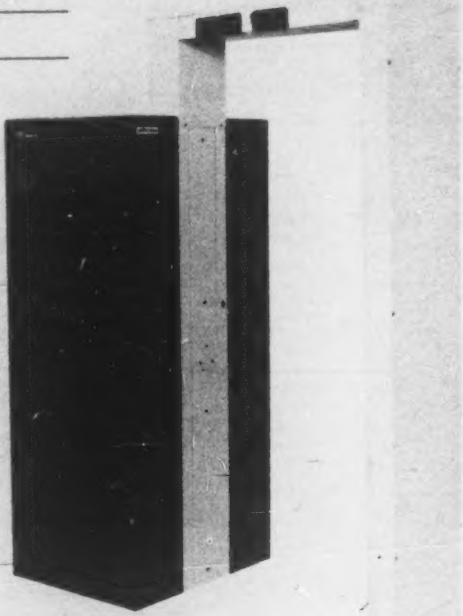
## Explosives Detection

# ENTRY SCAN
# MARK II



### Features

- High sensitivity
- High immunity to false alarms
- Processes 600 people per hour
- Compact design
- Optional metal detector
- Automatic test, calibration and self diagnostics
- Local and remote audio and visual alarms and controls

The Entry Scan Mark II represents the state of the art in explosives detection. It rapidly searches personnel for concealed explosives by quickly analyzing air samples collected from individuals as they enter the instrument's airstream. The rapidity and non-intrusive nature of the search assures acceptance. It is ideally suited for high risk access control to **Nuclear Power Plants, Government Facilities** and **Defense Contractors**. The Entry Scan Mark II can also be integrated with an optional metal detector to protect against weapons as well as explosives.

The instrument's patented detection process provides high sensitivity to explosives coupled with a high degree of immunity to false alarms.

The Entry Scan Mark II provides three processing modes to fit any application. In its normal mode it can process up to 600 people per hour which makes it ideal for high traffic entry points.

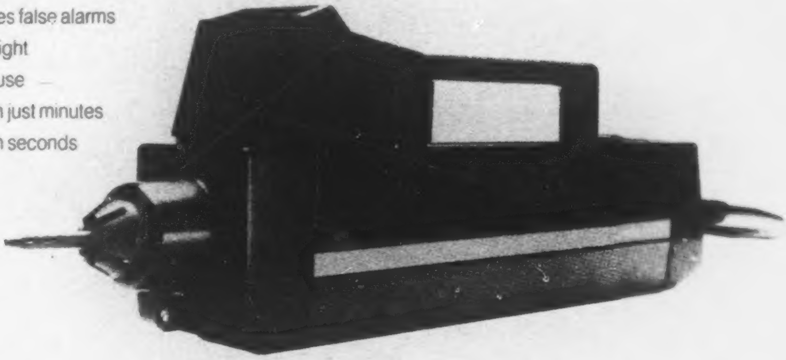
The instrument is attractively packaged to complement any decor and compactly designed to fit into areas where space is limited.

# Explosives Detection

## MODEL 97

### Features

- Detects a wide variety of military and commercial explosives
- Detects instantaneously
- Minimizes false alarms
- Lightweight
- Easy to use
- Ready in just minutes
- Clears in seconds



The ITI Model 97 is a fourth generation handheld explosives detector designed to be used by security personnel to search people, vehicles, places, and parcels for concealed explosives. The Model 97 detects the vapor produced by a wide variety of commerical and military explosives and provides both an audible and visual indication of alarm.

The Model 97 contains a unique real time detection system that can rapidly discriminate between the vapors from an explosive and those produced by a similar non-explosive material. The results are instantaneous as there is no tedious sample collection or slow analysis process in the system. Once an explosive has been detected by the unit, it is automatically purged clean and is ready to continue within a few seconds.

The Model 97 is lightweight and simple to use. It is contained in an unobtrusive attache style case and can be quickly made ready for use. Its simplicity of operation makes user training quick and painless.

## Explosives Detection

## MODEL 55

### Features

- Low cost
- Easy to use
- 2 minute warm-up
- Rugged construction

The ITI Model 55 Explosives Detector is a lightweight, sensitive instrument to be used to search people, vehicles, places and parcels for concealed explosives. The Model 55 "sniffs out" vapors which are continuously emitted from explosives and will alert the operator as soon as any suspect device is discovered. This instrument has a very rapid response to facilitate screening large volumes of suspect material and incorporates a circuit which distinguishes between explosives and vapor produced by similar nonexplosive substances.

The entire unit is contained in a small, rigid case with a shoulder strap so that it may be easily carried. A lightweight hand held detector gun is linked to the carrying case by a four foot service cable.

The Model 55 was developed to meet the need for an easy to use search tool at an affordable price.

## MODEL 35

### Features

- Reliable
- Ultra-lightweight
- No warm-up
- Battery operated
- No gas needed

The ITI Model 35 Portable Explosives Detector brings additional capabilities in the continuous battle against terrorism and crime. Its light weight, ultra portability and ease of use extend the range of personnel and applications able to use this type of equipment. The Model 35 consists of a battery operated handheld detector which is sensitive to the vapor emitted by explosives. It can be used to quickly screen packages or personnel for the presence of concealed improvised explosive devices. The instrument comes complete in an attache style case with a personnel search probe, detector check sample, spares kit, rechargeable battery and battery charger.

# Metal Detection

## MODEL MD-1

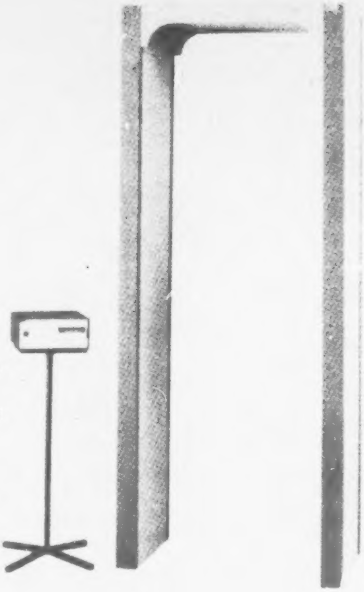
### Features

- Identifies type and amount of metal
- High sensitivity
- Attractive appearance
- Automatically compensates for stationary metal objects
- Can be synchronized to other MD-1s
- Meets the performance requirements set by the various U.S. regulatory agencies.

The ITI Model MD-1 is an advanced detection system to be used to rapidly and non-intrusively search people for concealed metal weapons. It consists of an archway connected by means of a cable to a control console. It not only alarms upon the discovery of an object, but also identifies the type and amount of metal concealed.

The sensitivity of the MD-1 is adjustable in 15 increments and can be set to detect as little as 1.05 ounces (30 grams) of steel. In order to minimize false alarms, it can be programmed to selectively alarm on only iron and steel or all types of metal.

The MD-1's attractive appearance, high sensitivity and ease of use make it ideal for a wide variety of applications.

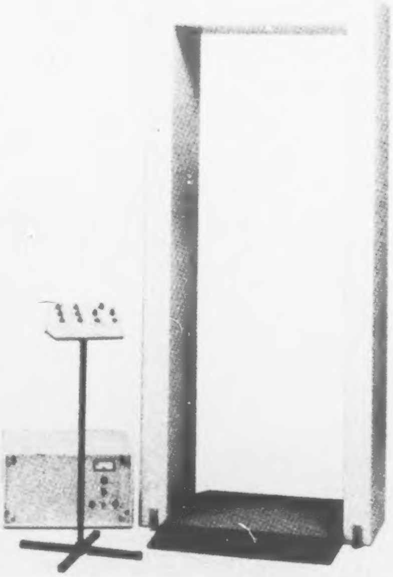


## MODEL MD-2

### Features

- Four sensitivity levels
- Automatic compensation for non-moving metal objects
- Identifies the location of discovered objects
- Can be synchronized to other MD-2s
- Meets the performance requirements set by the various U.S. regulatory agencies.

The ITI model MD-2 is an advanced metal detection system designed to rapidly screen personnel for concealed metallic weapons such as guns and knives. It can also be used effectively upon exit to screen people for metallic stolen property such as tools. The MD-2 not only alarms upon the discovery of a metal object, but also annunciates the location of the object as being in one of 13 sectors on the suspects body. The MD-2 is particularly useful in situations where pat down searches are required after an alarm condition. The object location feature limits the scope of the search. It thus accelerates the search process and enhances system acceptance, especially when innocent metal objects such as steel toed shoes or large belt buckles are routinely worn by the searched population.



## Metal Detection

## MODEL MD-3

### Features

- Four sensitivity levels
- Automatic compensation for non-moving metal objects
- Audible and visual alarm indicators
- Meets the performance requirements set by various U.S. regulatory agencies

The ITI Model MD-3 is a rugged walk through metal detection system designed to rapidly screen personnel for concealed metallic weapons such as guns and knives. It can also be used effectively upon exit to screen people for metallic stolen property such as tools. The MD-3 is easy to set up and simple to operate. It therefore finds use in a wide range of applications.

## HANDHELD MODELS
## MH-1, MH-2, MH-3

ITI provides a family of handheld metal detectors that cover a wide variety of applications. Each model is battery operated and has adjustable sensitivity, an audible alarm, and a battery condition meter. The MH-1 has a large diameter probe 5.72 in. (143 mm) to facilitate the rapid search of individuals for concealed weapons. The MH-2 has a cylindrical probe to provide for easy access into pockets and bags. The MH-3 has an extremely narrow detection field to precisely locate wires in letters and packages.

MH-1

MH-2

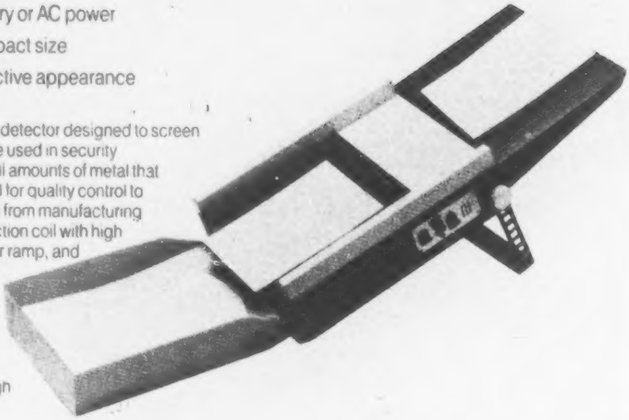
MH-3

# Metal Detection

## MODEL MM-1

### Features

- High sensitivity
- Two operating modes
- Adjustable sensitivity
- Battery or AC power
- Compact size
- Attractive appearance



The ITI Model MM-1 is a high sensitivity metal detector designed to screen letters and small packages for metal. It can be used in security applications to inspect incoming mail for small amounts of metal that may be present in a bomb. It can also be used for quality control to check finished packages for stray metal parts from manufacturing processes. The instrument consists of a detection coil with high sensitivity amplifier, operating controls, feeder ramp, and removable guide rails.

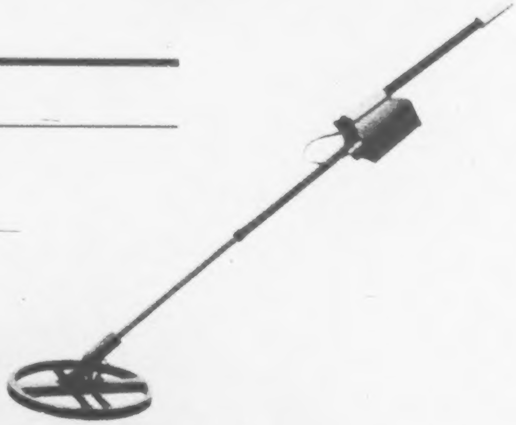
When metal is detected, the MM-1 initiates an audible alarm. A mode switch provides for selection of a latched, or momentary alarm output.

The MM-1 is ideal for screening mail in any high risk facility.

## MODEL ML-1

### Features

- High sensitivity
- Rugged design
- Watertight detector
- Constant sensitivity as batteries discharge
- Audible low battery alert



The ITI Model ML-1 is a rugged ground search metal detector designed to meet the rigid requirements of Law Enforcement and Military applications. It consists of a watertight detector mounted to a two part telescoping bar with attached electronics. It comes complete with carrying case and headphones. The Model ML-1 detects all sorts of metals including iron, steel, gold, copper, brass and silver. It is quick and easy to set up and operate and is powered by four 1.5 V batteries.

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4. MODEL 85

5. USER'S LIST

6. SUMMARY OF TEST RESULTS

7. R & D BROCHURE

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# ION TRACK INSTRUMENTS, INC.

## EXPLOSIVE DETECTION CAPABILITIES

ITI's commercially available explosive detectors can be helpful in detecting 84% of the FAA's future perceived threats (see attached charts). They can be helpful in detecting 99% of the current threat. This level of detection is unmatched in the world in any continuous explosive detector. This performance is the result of over twenty years of experience designing and manufacturing explosive detectors.

ITI is the world's leading supplier of explosive detection instruments, with an estimated 80% market share. ITI is the leading supplier of explosive detection systems to the U.S. Nuclear Power Industry and the U.S. Army. ITI's installed base of more than 400 walk through explosive detectors currently protects a majority of the U.S. Nuclear Power Plants from terrorist attack. The need to protect such high risk facilities was recognized by the Nuclear Regulatory Commission which mandated through 10CFR 73.55 that each plant screen individuals entering the protected area for explosives and firearms. ITI and it's affiliate U.K. companies also protect the Houses of Parliament, and several airports worldwide.

ITI introduced the world's first successful walk through explosive detector (Model 75), in 1978, after five years of research and development. ITI's current generation of equipment (Model 85) is capable of screening one person every six (6) seconds, in a non-intrusive manner, for explosives and firearms. ITI has also successfully completed a variety of special applications development programs under contract from the United States Government agencies, including the Department of Transportation.

Terrorist incidents are on the rise and many facilities that were once considered low risk for such attacks are now searching for equipment and systems to protect themselves. To date, facilities located in the U.S. have escaped relatively unscathed. The future doesn`t hold the same promise.

ITI, through its extensive experience in explosive detection, is uniquely positioned to help organizations defend themselves from such deadly threats.

ITI's product line includes walk-through and hand-held systems, that use proven technology, to detect a wide variety of high explosives including those commonly used by terrorists.

ITI's line of products using this technology show a high degree of sensitivity. While no system can guarantee immunity under all circumstances, each of ITI's products when properly used, can enhance security significantly in such applications as:

- o Personnel Screening
- o Building Search
- o Package Screening
- o Luggage Screening

ITI, under the sponsorship of the FAA, is pursuing an on-going research effort to develop advanced detectors which will apply a new technological approach to vapor detection. This approach builds on the extensive body of knowledge developed by ITI through its years of practical experience in the U.S. and abroad. While there are many promising technologies currently being researched by others for use in explosive detection, many of these technologies represent attempts to apply techniques originally intended for other purposes and have yet to be proved in practical day to day use.

ITI's other sophisticated security products include a complete line of weapons detectors. ITI also supplies high speed leak detection and quality control instrumentation for Industrial applications and computer assisted video imaging systems for laboratory use.

Ion Track Instruments, Inc., of Burlington, Massachusetts is a wholly owned subsidiary of Meggitt Holdings PLC of Wimborne, Dorset, England. Meggitt Holdings PLC is a rapidly expanding product oriented group of companies engaged in the manufacture and supply of advanced engineering products for a variety of specialty applications. Specific areas of their expertise are in Aerospace and Defense, Industrial Controls and Instrumentation, Energy Engineering, Electronics and Engineering Distribution.

3/17/89

## History of ITI Group Involvement in Explosive Vapor Detection

1. **1969** Designed and built the world's most sensitive tracer gas leak detector.

2. **1970** Modified the leak detector to detect dynamite explosives.

3. **1971** Successfully introduced the world's first continuous sniffing dynamite detector in active service. Apprehended the first terrorists by detecting dynamite on suspect hands in Northern Ireland.

4. **1972** Successfully completed research to improve selectivity of dynamite detector for the UK Government.

5. **1973** Introduced the first hand held bomb detectors in the USA for EOD applications.

6. **1975** Designed portable forensic analysis for explosives.

7. **1976** Made the world's first automatic combined x-ray and explosives sniffer for airline bags.

8. **1976** Made the world's first continuous sniffing TNT detector.

9. **1977** Successfully completed a research project for the FAA to produce a baggage pumping and detection system for explosives.

10. **1978** Introduced the ITI Model 75, the world's first automatic walk-through explosives detector. Began installation in US Nuclear Power Stations.

11. **1979** Installed Model 75's into the Houses of Parliament in the UK. Bombings on average were 2 per year for the preceding 10 years. Since installation, no bomb incidents have occurred.

12. **1979** The sister company of ITI was awarded the prestigious Queens Award for Technology for the work in designing the Model 75.

13. **1980-81** Successfully completed development project in conjunction with the FAA to improve sensitivity of the walk-through detector. Demonstrated detection of dynamite and commercial TNT at tests in SANDIA labs from explosives placed below one layer of clothing on the body.

14. **1983** Introduced the ITI Model 85 Walk-thru portable detector capable of detecting dynamite and TNT.

15. **1985** Designed and produced ITI Model 97.

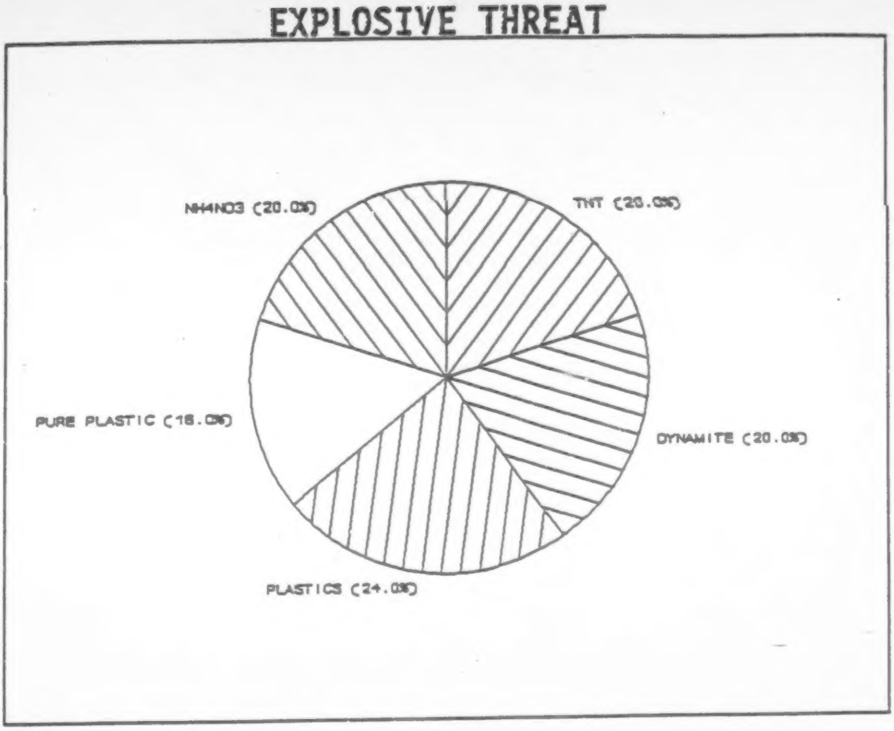
16. **1987** Carried out research for the FAA to improve detection of explosives.

17. **1988** Supplied Model 97's to US Army.

18. **1988** Strong response to Semtex at the FBI test.

19. **1989** Further research work for FAA has resulted in detection of pure RDX in real time in the ITI laboratory.

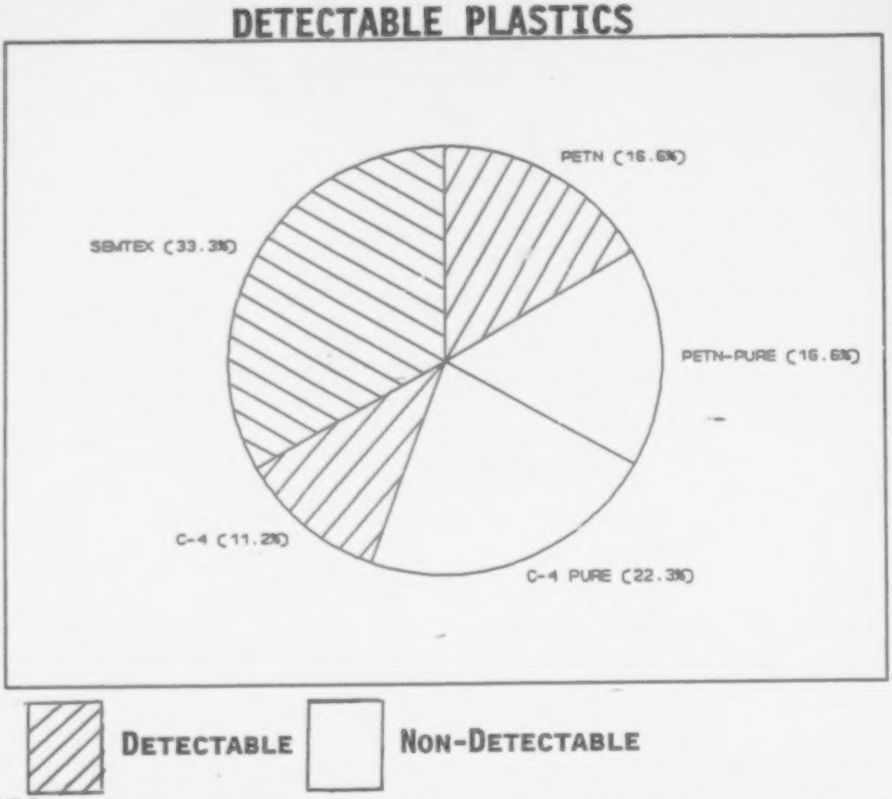
# EXPLOSIVE THREAT



▨ **DETECTABLE** ☐ **NON-DETECTABLE**

**84%** OF EXPLOSIVES CONSIDERED A THREAT BY FAA COULD BE DETECTED WITH COMMERCIALLY AVAILABLE VAPOR DETECTORS.

# DETECTABLE PLASTICS



**61%** of plastics could be detected with commercially available vapor detectors.

NOTES

Semtex contains manufactured impurities that are detectable. 45% RDX, 45% PETN 10% Impurity

Some C-4's contain DNT and other residual constituents from remanufactured composition B.

Some PETN based sheet explosives contain volatile nitro-organic impurities which are detectable.

PETN and C-4 based explosives that do not contain impurities may be detectable if sufficiently contaminated with vapor from another material which does give a response. (NG, EGDN, etc.).

ION TRACK INSTRUMENTS

# OPERATIONAL REPORT

## EXPLOSIVE DETECTION FOR AIRLINE USE

Report of Operational test with the Model 97 explosive detector at Logan International Airport, in conjunction with Northwest Airlines and the FAA 15 - 16 February 1989.

iTi

Explosive detectors have been in use for many years throughout the world. They have safeguarded people and property from terrorist bombs since the late 1960's

Walk-through archway type detectors screen people at access control points of many large facilities worldwide. Ion Track Instruments' (ITI's) Model 85 is used extenisvely throughout the US Nuclear Power industry as well as in the British Houses of Parliament.

ITI's portable M97 is a handheld detector that allows the operator more flexibility without sacrificing sensitivity. The M97 is standard issue for the US Army EOD worldwide and is used by the US Navy and a variety of high risk Government agencies.

The M97:

- Detects a wide range of military and commercial explosives

- Detects in less than 2 seconds

- Requires no operator interpretation

- Weighs less than 35 pounds

- Clears in seconds

- Can be powered from either 110 or 220 VAC or from internal battery

The portability, flexibility, and ease of use make it an excellent tool for the airline industry.

ITI, in cooperation with FAA, Northwest Airlines and ARA Security Services tested the M97 at Logan International Airport in Boston. Actual airline passengers and baggage were tested to determine how to best use explosive detectors without causing system delays. The results in this report describe how over 1000 bags were searched with a single M97 and no system problems occurred.

This test was to study different search techniques and gather statistics of passenger and baggage volumes, it was not intended to test detection. Tests of the detection capabilities of the M97 have been conducted by the FBI, Maryland State Police, and others. Their results are readily available.

Again, our recent test was an operational field trial to utilize explosive detectors as an additional security measure. Vapor detectors such as the M97 can add significantly to airline security.

## How Passengers and Baggage were Tested

The tests were conducted in two phases. Phase one screened checked baggage bound for international destinations. Phase two tested carry-on items on both domestic and overseas flights. Each phase took place on a separate day with average volumes of passengers booked on the flights.

Statistics from each phase were recorded separately and are shown that way in this report. Collectively, these statistics provide valuable information and will help in the design of better airport security systems.

## How Checked Baggage for International Flights Examined

In order to test checked bags, we used the portable M97 explosive detector at the ticket counter. Here, an extension table was setup before the x-ray machine already in place at the counter. After passengers received seat assignments at the counter, they placed their bags on the table. The different types of bags, as seen in Figure 1, were scanned with the M97 by the security agent. Next, the bag was passed into the x-ray as normally done with checked baggage. All 170 bags for several international flights were tested with the M97.

The operator was able to spend an average of 20 seconds per bag before a second passenger came to the table from the ticket counter. This buffered effect from the ticket counter allowed the operator to spend a maximum amount of time on each bag without creating a line or delay in the system. As the traffic from the counter fluctuated, the average time per check adjusted accordingly.

The five types of bags required different times to check. Garment bags with many pockets and zippers took a little more time.

Suitcases were gently flexed by the passenger at the table. Air escaped through the suitcase cracks allowing better detection without having to open the case. The security agent also noted whether the passenger was willing to help test their bag as a profile check.

Below are the times on average spent on each type of checked bag without delaying the system. This was not the total time needed to check that type, but the average time taken.

Figure 1

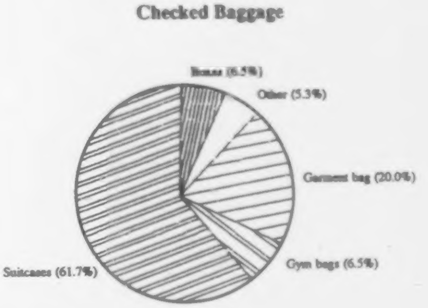
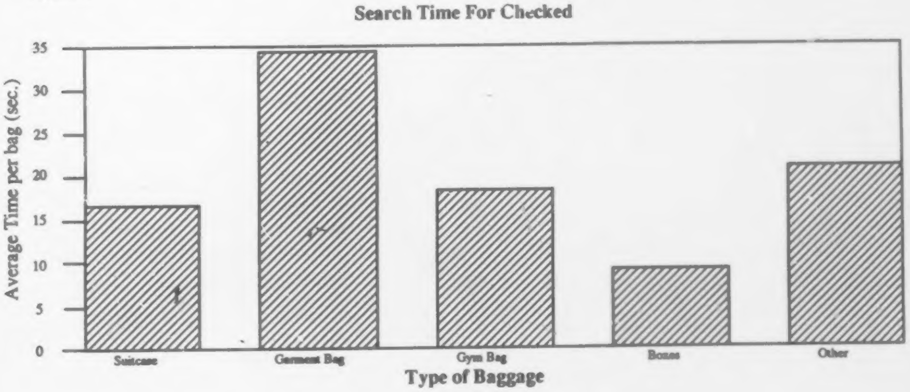


Figure 2



## Carry-on Items Checked for Explosive Vapors

As with the checked baggage phase, the carry-on items were tested with M97 before being x-rayed. A function of the test was to integrate explosive detection into the already existing procedure for searching carry-on items.

At the access control point, passengers presented their boarding pass to an agent, then placed their items on a table directly in front of the x-ray machine. Each item was scanned with the M97 then x-rayed.

Positive responses from the M97 were noted but in all cases the final decision to investigate a bag further was made by the x-ray operator.

This test procedure seemed best for this type of access control layout. The agent checking boarding passes was the buffer to reduce any line at the test area. Because of the higher volume of carry-on items, a more rapid search was conducted.

The amount of carry-ons are seen by type in Figure 3 and search times are viewed in Figure 4.

Figure 3

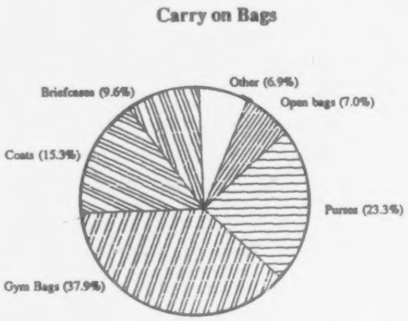
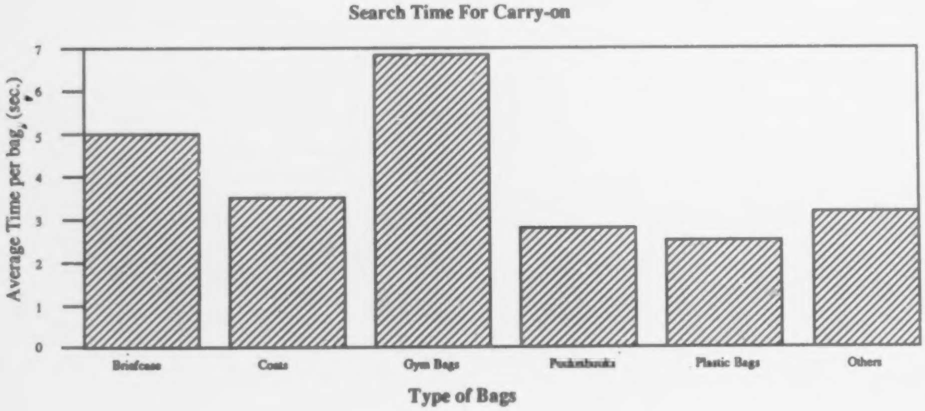


Figure 4



## FINDINGS

### Checked Baggage Responses

A total of 170 bags (100% of bags bound for international flights) were scanned by the M97 at the check station. Responses were as follows:

Clear 75.3%
Positive 2.3%
Retest condition 22.4%

The M97 showed 4 positive responses. In each case, the bag was x-rayed or hand searched by the agent.

One doctor's bag that was searched contained medication (probably nitroglycerin), a valid indication.

The retest lamp lit on the M97 when a masking chemical vapor or halogen was sensed. This could immediately be reset for a second test. In each case, the agent questioned the passenger about the bags contents before a retest and x-ray.

### Responses of Carry-on Items

Out of 851 carry-on bags (94% of all bags bound for both domestic and international flights) searched by the M97, three bags caused a positive response. One of these was opened to find a large amount of perfume and deodorants. This represents only a 0.3% false alarm rate. Other responses:

Clear 81.7%
Positive 0.3%
Retest Condition 18.0%

### Low False Alarm Rate

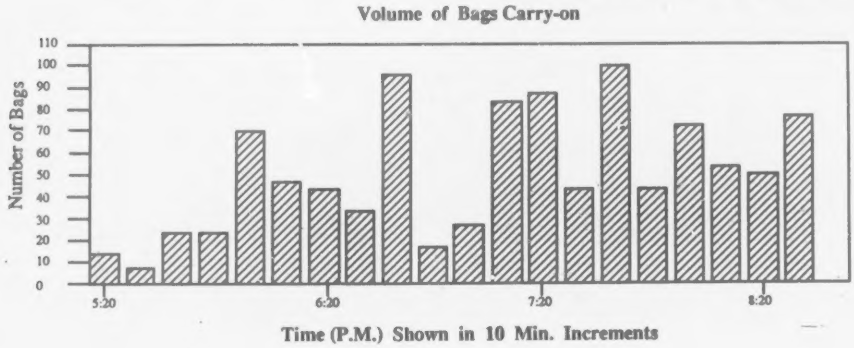
When the data is combined for the total number of bags searched by the M97 the false alarm rate is 0.68% (seven out of over one thousand).

### Results of Passenger Page

To avoid having to page passengers to return to their luggagae, we recommend screening at point of origin locations. Should a passenger have to be paged and return to the Baggage Claim Office, an average time of 2-1/2 minutes was recorded.

As seen in Figure 5, the volume of bags through carry-on fluctuated greatly throughout the test. This was due to increased number of bags, flight announcements and changes in departure times.

Figure 5



## Passenger and Baggage Flow

Figures 6 and 7 show frequency distribution of passenger and baggage volumes. Figure 6 for instance, shows that between 7:10 p.m. and 7:30 p.m. the traffic increased tremendously. The peak at 7:20 represents a tour group. The group was batch ticketed and released to the test area. The baggage as seen directly below in figure 7 also peaked at that time. These graphs demonstrate that volumes of passengers fluctuate slightly and are prone to surges. Portable equipment such as the M97, was extremely useful whereby additional units could be put on line in seconds to cope with line surges. In our case, a standby unit was ready but not put on line for this quick pulse in traffic.

Figure 6

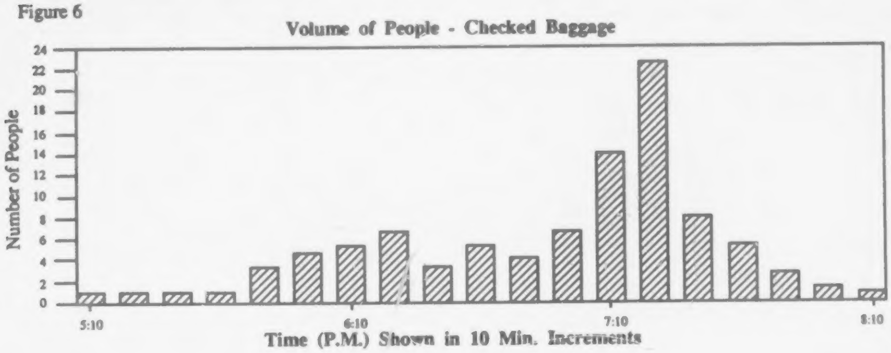
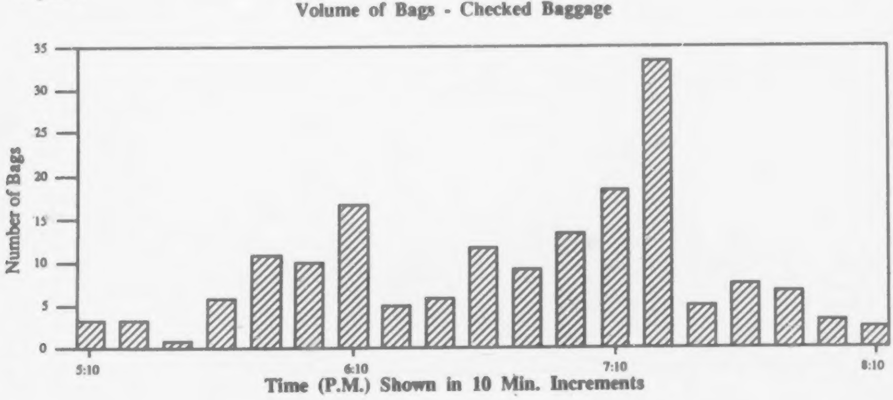


Figure 7



## CONCLUSIONS

The Operational Test at Logan demonstrated vapor detection could easily by implemented into an established system.

1. Vapor detectors can be added without adding any delay if a continuous analysis instrument that responds in less than 2 seconds is used.

2. 100% of carry-on and checked bags bound for international flights can be searched without causing any delays.

3. Operator training will take less than 1/2 hour.

4. Additional manpower required is minimal.

5. Use of vapor detectors improves x-ray operator vigilance.

6. False alarms are minimal and can be quickly resolved.

## Public Feedback Reflects Praise

Passenger comments reflect overwhelming support for additional security even if it means a slight delay.

"I'm impressed, it's better than it was a year ago".

"I fly for Northwest and I really appreciate this test".

"Why the extra security? Good, the more the better".

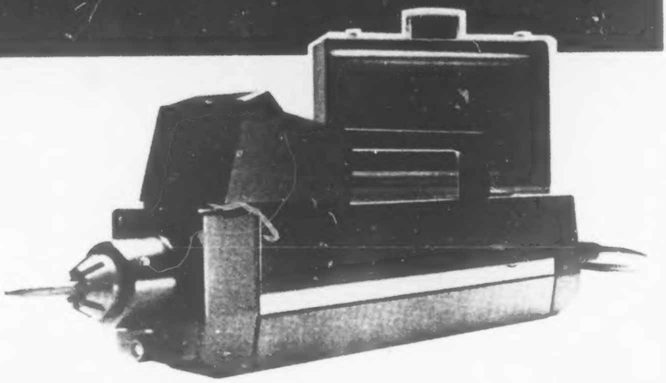
"Security should be this tight everywhere in the world".

## RECOMMENDATIONS

We at ITI feel it is time to move forward and increase airline security. Explosive Detectors should be a component of a good security system that uses the latest equipment with properly trained, competent operators. This test has been an important step in increasing our edge against terrorism.

# Explosives Detection Equipment

## MODEL 97



## Description

The ITI Model 97 is a fourth generation handheld explosives detector designed to be used by security personnel to search people, vehicles, places and parcels for concealed explosives. The Model 97 detects the vapor produced by a wide variety of commercial and military explosives and provides both an audible and visual indication of alarm.

The Model 97 contains a unique real time detection system that can rapidly discriminate between the vapors from an explosive and those produced by a similar non explosive material. The results are instantaneous as there is no tedious sample collection or slow analysis process in the system. Once an explosive has been detected by the unit, it is automatically purged clean and is ready to continue within a few seconds.

The Model 97 is lightweight and simple to use. It is contained in an unobtrusive attache style case and can be quickly made ready for use. Its simplicity of operation makes user training quick and painless.

## Features

- Detects a wide variety of military and commercial explosives
- Detects instantaneously
- Minimizes false alarms
- Lightweight
- Easy to use
- Ready in just minutes
- Clears in seconds

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## Operation

The Model 97's operation is based on twin electron capture detectors (ECD's). Suspect vapor is drawn into the instrument through a membrane which isolates it from ambient air. The vapor is then mixed with Argon, an inert carrier gas, and fed down two columns. One of the columns is coated with a special material which selectively retards the progress of molecules from high explosives. Each of these columns terminate in an ECD.

When the vapor/carrier gas mixture enters the ECD it is bombarded by beta particles from a sealed radioactive source (similar to the amount of radioactivity present in ionization smoke detectors). The beta particles dislodge electrons from the carrier gas molecules which supports the ECD's standing current. If molecules from high explosives are present they absorb these free electrons and thus change the standing current and trigger an alarm.

The timing sequence of the signals from the twin ECD's discriminates between vapors from explosives and those produced by similar non explosive substances.

## Applications

The Model 97 because of its instantaneous response and rugged construction is ideal for continuous screening applications. It can be used, for example, to check suspect luggage, packages, storage lockers, automobiles, buildings, and people, etc. Model 97 applications include **Airlines, Nuclear Power Plants, Military Bases, Police Departments, and Sensitive Government Facilities**. The Model 97 is an ideal tool to enhance security at any high risk facility.

## Contents

*Instrument Case*

Handheld instrument
Battery
Argon Bottle
Regulator
Headphones

*Accessories Case*

Spare gas bottle
Spare battery pack
Instrument Charger and cord
Power supply cord
Spare membranes
Test sample

## Options

| *Item* | *Description* | *Part #* |
|---|---|---|
| Transfer valve | Used to fill 4 ft³ bottles from large supply tank | 220-027 |
| Replacement membranes | For Model 97 Nozzle | 220-121 |

## Specifications

| | |
|---|---|
| 1. Sensitivity | 1 part explosive vapor in $10^{11}$ parts air. |
| 2. Explosives Detected | Wide variety of military and commercial explosives. Detection matrix available to qualified buyers upon request. |
| 3. Response Time | 2 seconds or less. |
| 4. Selectivity | Can rapidly discriminate vapor from explosives and that produced by other materials. Shows excellent immunity to alarms caused by halogenated solvents. |
| 5. Detection System | Unique twin ECD gas chromatography system. Long life $Ni^{63}$ beta source. |
| 6. Alarm Indicators | Visual and audio alarms.<br>Each operates independently.<br>Headphone jack. |
| 7. Other Indicators | Nozzle temperature O.K.<br>Detector temperature O.K.<br>Low battery<br>Low standing current<br>Bar graph of signal output |
| 8. Controls | Pump on/off<br>Audio on/off for integral loudspeaker<br>Reset<br>Standing Current check |
| 9. Power Supply | 1. 12 volt rechargeable battery, 6 hour duty cycle<br>or<br>2. External 12 volt battery supply for continuous operation<br>or<br>3. in conjunction with battery charger an AC supply of<br>240 V ± 30V, 50–60 Hz<br>120 V ± 15V, 50–60 Hz |
| 10. Ready for use | 15 minutes or less |
| 11. Portable Endurance | Battery–6 hours<br>Argon–12 hours |
| 12. Carrier Gas<br>Gas bottle | 99.998% pure Argon<br>4 ft³ |

| | Length | Width | Height |
|---|---|---|---|
| Instrument and Case | 20" (500mm) | 14.8" (370mm) | 6.4" (160mm) |
| Packed for Shipping | 22.4" (560mm) | 20.4" (510mm) | 8.8" (220mm) |
| Accessories Case | 20" (500mm) | 14.8" (370mm) | 6.4" (160mm) |
| Packed for Shipping | 22.4" (560mm) | 20.4" (510mm) | 8.8" (220mm) |

| | |
|---|---|
| Instrument and Case | 29.7 lbs (13.5 kg) |
| Packed for Shipping | 35.64 lbs (16.2 kg) |
| Accessories Case | 26.84 lbs (12.2 kg) |
| Packed for Shipping | 32.34 lbs (14.7 kg) |

*The manufacturer reserves the right to change the specifications without notice.

iTi Security
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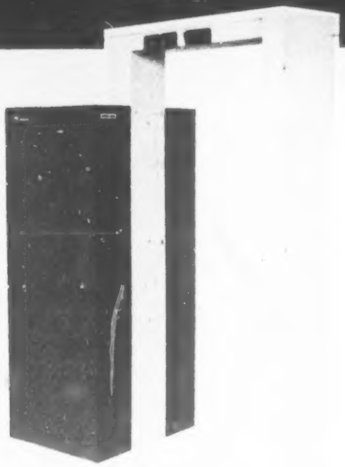
# Explosives Detection Equipment

## ENTRY SCAN MARK II



## Features

- High sensitivity
- High immunity to false alarms
- Processes 600 people per hour
- Compact design
- Optional metal detector
- Automatic test, calibration and self diagnostics
- Local and Remote audio and visual alarms and controls

## Description

The Entry Scan Mark II represents the state of the art in explosives detection. It rapidly searches personnel for concealed explosives by quickly analyzing air samples collected from individuals as they enter the instrument's airstream. The rapidity and non intrusive nature of the search assures acceptance. It is ideally suited for high risk access control to **Nuclear Power Plants, Government Facilities** and **Defense Contractors.** The Entry Scan Mark II can also be integrated with an optional metal detector to protect against weapons as well as explosives.

The instrument's patented detection process provides high sensitivity to explosives coupled with a high degree of immunity to false alarms.

The Entry Scan Mark II provides three processing modes to fit any application. In its normal mode it can process up to 600 people per hour which makes it ideal for high traffic entry points.

The instrument is attractively packaged to complement any decor and compactly designed to fit into areas where space is limited.

iTi Security

## Operation

The Entry Scan Mark II automatically signals each person to enter the portal by means of a green "enter" light. While in the portal, an air sample is collected from around the person being searched by means of a gentle air curtain. This air sample is continuously analyzed in the detection system for the presence of molecules from explosives. The detection mechanism selectively traps vapor of interest from the sample and selectively desorbs it into an argon carrier gas stream which carries it into a high sensitivity Electron Capture Detector (ECD). Any molecules from explosives present in the carrier gas mixture will absorb electrons in the ECD and trigger an audible and visual alarm. An additional interface permits alarms to be routed to an alternate location or to a computer for logging purposes.

At the completion of the detection cycle the Entry Scan signals the person being searched to exit by means of a green light and an audible chime. If the individual should leave the instrument before the cycle is completed, an audible and visual alert signal will be generated. When no personnel are being processed for an extended period of time, the system automatically switches to Standby Mode which conserves argon gas and increases operational life. When the first person to be processed approaches the Entry Scan, the system automatically returns to the normal operating mode.

The Entry Scan presents simplified controls and indicators to enable easy operation and monitoring of the system. In addition, it contains self diagnostics and indicators to facilitate service. A test and calibration option is available which automatically tests the Entry Scan at the push of a button and maintains the circuitry at optimum sensitivity.

## Applications

- Airports
- Nuclear Power Plants
- Corporate Headquarters
- Computer Centers
- SNM Processing Plants
- Precious Metal Refineries
- LNG Storage Facilities
- Petroleum Refineries
- Drug Manufacturing
- Public Utilities
- Construction Sites
- Government Facilities
- Manufacturing Plants
- Oil & Gasoline Storage
- Military Check Points

## Options

| *Item* | *Description* | *Part #* |
|---|---|---|
| Metal Detector | Customized Walk-thru metal detector for integration into the system | MD-85 |
| Test and Calibration System | Automatically injects a vapor standard at the push of a button and adjusts the instrument to optimal sensitivity. | CT |
| Low Pressure Alarm | Initiates an alarm condition when argon gas supply is low. | 220-046 |
| Gas Regulator | Maximum inlet 2500 psi, Delivery range 4-60 psi, Standard inlet connection 510 | 220-022 |

## Specifications

| | |
|---|---|
| MAIN CONSOLE | |
| Processing Rate | Adjustable as required<br>A. Walk Thru<br>B. Fast (6 seconds/ 600 people/hr.)<br>C. High Sensitivity (11 seconds/327 people/hr.) |
| Sensitivity | One part per trillion for nitrated base explosives |
| Alarms | Audible and visual alarms for Explosives<br>Non Valid Test and End of Test<br>Audible Alarm for Access Doors |
| OPERATIONAL CONTROLS AND INDICATORS | |
| Controls | Standby on/off switch with indicator<br>Main Supply on/off switch with indicator<br>Power Supply on/off switch with indicator<br>System Test Push Button<br>Mode Switch with indicators for each mode<br>A. Walk Thru Processing Rate<br>B. Six Seconds Processing Rate<br>C. Eleven Seconds Processing Rate<br>Alarm Reset Push Button<br>Display Function Switch for:<br>A. 24 volt Power Supply<br>B. 12 volt Power Supply<br>C. 15 volt Power Supply<br>D. 15 volt Power Supply<br>E. Detector Status |

| | |
|---|---|
| Controls Cont. | F. Heater One Temperature<br>G. Heater Two Temperature<br>H. Alarm Level<br>I. Signal Reading during Processing<br>Argon Flow Control Valve<br>Alarm Level Control<br>Tamper Switches (Access Doors 2/unit) |
| Indicators | Pump Fault, Low Argon Pressure, System Fault, Not Ready, Ready, Wait, Enter, Heater One, Heater Two, Detector, Foil Sync., Power Supply Fault |
| Personnel Control Indicators | Enter, Wait, Exit |
| Displays/Meters | Elapsed Time Meter<br>Argon Flow Meter<br>Digital Display (utilized with function switch) |
| Electrical Supply | 110 Volts 60 Hz<br>Supply Outlets available in instrument for Service/Maintenance requirements<br>(Special Order/Option 240 Volts 50 Hz) |

| Dimensions | Height | Width | Depth |
|---|---|---|---|
| Main Console: | 69.5<br>(176.5 cm) | 24 in.<br>(61 cm) | 30.5 in<br>(77.5 cm) |
| Portal: | 84 in.<br>(213.3 cm) | 4 in<br>(10 cm) | 17.75 in.<br>(45 cm) |
| Portal with Metal Detector: | 84 in.<br>(213.3 cm) | 4 in.<br>(10 cm) | 32.75 in.<br>(83.2 cm) |

Opening between console and portal: 31.5 in. (80cm)

| | |
|---|---|
| Argon Supply Required | Internal replaceable argon cylinder (99998% Pure Argon Required) |
| Argon Consumption | Normal Operation: 1 cu. ft/hour (approx.)<br>Standby Operation: 1/10 cu. ft./hour (approx.) |
| Detector Response | 1.5 seconds |
| Detector | 10 Millicurie Ni63<br>Heated *Sealed* Detector |
| Environmental | Normal ambient condition ranges for temperature and humidity are recommended however the instrument will tolerate geographic extremes. |
| Remote Alarm Interface | Provided |
| Construction | Single vertical column of structural steel welded frame with baked enamel texture steel panels. |

**REMOTABLE POWER/CONTROL MODULE**

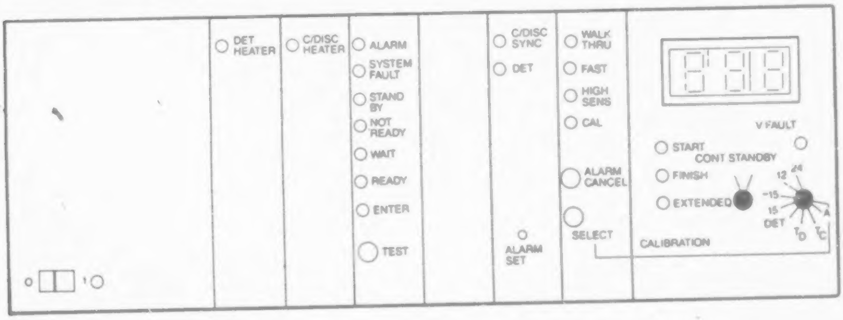
| | |
|---|---|
| Controls | Supply on/off switch w/indicator<br>Standby on/off switch w/indicator<br>Audible Alarm on/off switch<br>Alarm Reset |
| Indicators | ~~Alarm,~~ Not Ready, Ready, Low Argon Pressure, System Fault |
| Cable | 100 feet w/connectors |
| Construction | 19 inch rack configuration console which can accommodate up to two Control Modules with handles and adjustable legs |

| Dimensions | Height | Width | Depth |
|---|---|---|---|
| | 5.24 in.<br>(13.3 cm) | 8 in.<br>(20.3 cm) | 6.8 in.<br>(17.3 cm) |

| | |
|---|---|
| Optional | Up to four MK II's can be integrated into one 19 inch rack configuration console |
| Shipping Weights | Total weight: 631 lbs (287 kg)<br>Total weight with metal Detector: 720 lbs. (324 kg) |

| Shipping Dimensions | Height: | Width: | Depth: |
|---|---|---|---|
| Console: | 76 in.<br>(193.0 cm) | 32 in.<br>(80cm) | 36 in.<br>(91.4 cm) |
| Portal: | 88 in.<br>(224 cm) | 8 in.<br>(20 cm) | 22 in.<br>(56 cm) |
| Portal with Metal Detector: | 90 in.<br>(228.6 cm) | 24 in.<br>(61.0 cm) | 10 in.<br>(25.4 cm) |

**OPERATIONAL CONTROLS AND INDICATORS**



The manufacturer reserves the right to change the specifications without notice.

iTi Security
108 Terrace Hall Avenue
Burlington, Massachusetts 01803
Telephone (617) 272-7233 Twx 7103321808
Facsimile (617) 273-3065

## CUSTOMER USER LIST

The following list represents a cross section of approximately 25% of our clients who are currently using the Model 97 and/or the Model 85 Explosives Detection Systems to secure these facilities.

ION TRACK INSTRUMENTS, INC.
Fri 17-Mar-89 USER'S LIST 97 & 85 1

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ALABAMA POWER CO.

AMERICAN AIRWAYS CHARTERS INC.

AMERICAN ELECTRIC POWER CO.

AMERICAN EMBASSY LIMA PERU

AMERITECH SERVICES INC.

ARIZONA PUBLIC SERVICE CO.

ARKANSAS POWER & LIGHT CO.

BABCOCK AND WILCOX

BALTIMORE GAS AND ELECTRIC CO.

BOSTON EDISON COMPANY

BOSTON POLICE DEPARTMENT

BROOKHAVEN NATIONAL LABORATORY

CAROLINA PWR & LGT (BRUNSWICK)

CAROLINA PWR & LGT (ROBINSON)

CAROLINA PWR & LGT (HARRIS)

CENTRAL MAINE POWER CO.

CLEVELAND ELECTRIC ILLUMINATI

COMMONWEALTH EDISON

CONSOLIDATED EDISON CO.

CONSUMERS POWER COMPANY

DAIRYLAND POWER COOP.

DETROIT EDISON COMPANY

E.I. DUPONT

EXXON NUCLEAR CO., INC.

FLORIDA POWER & LIGHT CO.

FLORIDA POWER CORP.

GENERAL ELECTRIC

GENERAL ELECTRIC CO.

GEORGIA POWER CO.

GEORGIA POWER CO.

GPU NUCLEAR

GPU NUCLEAR CORPORATION

HOUSTON LIGHTING & POWER CORP.

MISSISSIPPI POWER & LIGHT CO.

NEBRASKA PUBLIC POWER DISTRICT

NEW YORK POWER AUTHORITY

NORTHEAST UTILITIES SERVICE CO

NUCLEAR FUEL SERVICES

OMAHA PUBLIC POWER DISTRICT

PACIFIC GAS AND ELECTRIC CO.

PENNSYLVANIA POWER AND LT. CO.

PHILADELPHIA ELECTRIC CO.

PORTLAND GENERAL ELEC. CO.

PUBLIC SER. CO. OF N.H.

PUBLIC SERVICE ELEC. & GAS CO.

SACRAMENTO MUNICIPAL UTILITY

SOUTHERN CALIF. EDISON CO.

SYSTEMS ENERGY RESOURCES INC.

TENNESSEE VALLEY AUTHORITY

TEXAS UTILITIES GENERATING

TOLEDO EDISON COMPANY

UNION ELECTRIC CO.

VERMONT YANKEE NUC. POW. CORP.

VIRGINIA ELECTRIC & POW. CO.

WASHINGTON PUB POS SUPPLY SYS

WISCONSIN ELEC. POWER CO.

WISCONSIN PUBLIC SERVICE CORP.

WOLF CREEK NUCLEAR OPER CORP.

YANKEE ATOMIC ELECTRIC CO.

# NEWS

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## U.S. Army Awards Record Contract To Massachusetts Firm For Bomb Detectors

Burlington, MA - The United States Army has awarded ITI Security the largest contract for bomb detection devices in Army history. In awarding the $1.3+ million contract, the Army's Materials Command will equip all its EOD teams with ITI's Model 97 Explosives Detector and ITI's bomb detection technology.

The US Army's Explosive Ordinance Disposal (EOD) Teams have the responsibility to provide bomb detection and handling services from both the Army and Executive branch of the government. Army EOD teams support major national and international events by screening facilities and packages. During Presidential appearances the Army EOD teams operate in concert with the Secret Service to counter bomb threats. These units will now utilize ITI Security's Model 97.

Ion Track Instruments, Inc. and its British sister company, Analytical Instruments (Ai) have over 20 years experience in bomb detection and counter terrorism, beginning with the development of bomb detection devices to foil bomb attacks in Northern Ireland. During this period, the company introduced the world's first portable bomb detection devices which sample air around a package or individual and determine accurately and instantly the presence of vapors from explosives. ITI has introduced additional products in the U.S. to further protect against bomb attacks by criminals and terrorists. In addition to being selected by the Army, ITI products are in extensive use in the U.S. nuclear power industry, and are responsible for protecting Britain's Houses of Parliment.

ITI Security is also engaged in two research contracts for the Federal Aviation Administration, addressing bomb threats against airlines. The projects deal with passenger screening. The success of the FAA contracts will improve bomb detection technology by several orders of magnitude.

Criminal and terrorist bombings have mushroomed from rare regional incidents to a large-scale international problem of crisis proportions. In the 1,833 domestic bombings since 1976, 99% of the explosives used were detectable by ITI equipment. These attacks have been directed at airlines, government facilities, military installations, and organized events, as well as against individuals in government and the private sector. As security methods (metal detectors, x-ray machines, enhanced security forces) have been adopted, criminals and terrorists have refined their techniques.

"We are now dealing with bomb threats that x-rays cannot identify because explosives can be formed into innocent appearing shapes," says John Paderson, Sales and Marketing Manager for ITI Security. "Metal detectors will not pick these up because of the relative absence of metal in the bomb. Effective security in the future is going to require a combination of techniques including highly senistive, reliable bomb detection."

ITI Security's product line includes walk-through and hand-held bomb detection systems. In addition to products, ITI Security provides research in non-explosive substance detection, taggants, and chemical and biological warfare agents.

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# ION TRACK INSTRUMENTS'

## NON-NUCLEAR USERS LIST

## MODEL 85 & 97

US. ARMY

US NAVY

NAVAL RESEARCH

SAMDIA LABS

BALTIMORE WASHINGTON AIRPORT

ARAMCO OIL CO.

B.P. BRITISH PETROLEUM

HOUSES OF PARLIAMENT

MANILA BAY CASINO

BANK OF CEYLON

CHASE MANHATTAN BANK

EUROPEAN POLITICAL RESOURCES

STRATHCLYDE POLICE

HOUSES OF PARLIAMENT

BRITISH GAS

LONDON TRANSPORT

SRI LANKAN ARMY

EUROPEAN DEPARTMENT STORES

PRICE WATERHOUSE

INDIAN HIGH COMMISSION

SEOUL AIRPORT POLICE

MORGAN GRANFELL

BANK OF CEYLON

NUCLEAR FUEL SERVICES

LAWRENCE LIVERMORE LABS

TEXACO INTERNATIONAL

FLORIDA SENATE

MASON & HANGER/ JOHNSON SPACE

A.A.I. CORP

ROYAL PALACE MIDDLE EAST

EUROPEAN NUCLEAR POWER STATIONS

WEST AFRICAN PRESIDENTIAL PALACES

ITALIAN POLICE

SINGAPORE AIRPORT

PHILLIPINES POLICE

NIGERIAN AIRPORTS

INDIAN ARMY

MIDDLE EASTERN POLICE FORCES

ONGC INDIA

CREDIT SUISSE

FOREMAN & COMMONWEALTH OFFICES

MIDDLE EAST AVIATION SAFETY DEPT.

ANCARNI ENGINEERING COMPANY

RAF BASES

BGAMEX

GREEK ARMY
POST OFFICE
SUDAN POLICE
PRESIDENTIAL GUARD INDIA
THE GARDA IRELAND

## SUMMARY OF MODEL 97 DETECTION TESTS

### I. FBI TEST

This test was conducted on 21 - 24 March 1988 at the FBI Laboratory Forensic Science Research and Training Center FBI Academy. This performance test used explosive detectors form ITI and other manufacturers to find hidden explosive in several "real" scenarios.

### FBI TEST RESULTS

While the competition had mixed results with nitro glycerin, Ammonium Nitrate, DNT and TNT, ITI readily found these. None of the equipment found pure PETN or RDX. Dynamite, which was readily detectable by everyone, was not tested in order not to contaminate the test area.

Both automobile and typical office senarios were also used in performance testing. ITI found many of the hidden explosives, whereby the competition had mixed success. The detection capabilities demonstrated by the Model 97 rated above the competition.

### FBI TEST PROCEDURE

1. The search method used will be a "directed" search, i.e. pre-numbered areas (labeled with 3 X 5 cards) will be searched by all instruments thus eliminating the search ability of the operator as a variable.

2. No operator, scorer/observer, or witness will be permitted to touch any search area. For example, if a desk drawer is to be sampled it will already be partially open.

3. The Operator is the only person who can determine a "hit" or "miss".

4. Upon receiving a positive response or "hit" followed by a rapid clearing of the detector a second sampling should be performed. Both responses will be recorded.

5. Due to the nature of the exercise, all instruments will be required to operate on battery power.

6. Upon completion of the testing in each area the test results will be signed and sealed in the provided envelope. They should immediately be delivered to the test coordinator.

7. If an instrument becomes inoperable due to failure, overload or expendable supply replacement the test coordinator must be notified before corrective action is taken. A maximum of 30 minutes is permitted after which time the instrument will be removed form the test phase and allowed to clear. The sampling can continue at a late point. The event will be recorded by the scorer/observer.

8. Repeated failure or overload which appears to seriously threaten the time schedule may result in the instrument being declared inoperable by the referee for the remainder of the test phase.

## ITI Comments on the FBI Explosives Detector Evaluation

1. We would point out that the devised test scenarios were of the "response" type as opposed to routine screening operations. WE feel it would have been instructive to engineer a security checkpoint scenario in which the operator would have a chance to obtain vapor from inside the cases/packages. It is common practice in checkpoint applications to set conditions and employ techniques to enhance detection. For example it would have been useful to show the benefits of some of the techniques used to extract vapor from packages. These include non-contact thermal pumping (raising the package temperature rapidly by the use of a high powered light), burping of flexing the package to expel air and penetration of the barrier with needle probes. Also the atmosphere in the vicinity of the test would not be heavily contaminated with both halogens and nitro compounds.

2. The results of sniffing Semtex explosive were not reported because it has been assumed that the explosive sample had been contaminated by EGDN. Our tests with the Model 97 showed that the Semtex has a very volatile nitro compound in the headspace vapor which is easy to detect this vapor was shown to be DIFFERENT for EGDN.

3. Internationally based terrorist organizations use ANPO and SEMTEX. Inclusion of these materials would have been more typical of the threat faced by some of the Government Agencies.

4. We would like to take the opportunity to point out the difference between discontinuous sampling devices and continuous sniffing devices. The Model 97 is a continuous sniffing device which will continue to operate in a contaminated background as was demonstrated during the first morning of the trials. The contaminated background, however, may have impaired the effective sensitivity of the instrument.

5. Contaminated backgrounds and hang-up from previous tests causes false positive in batch sampling detection systems. For this reason with this type of instrument, blank samples should be taken after each positive detection until no response is achieved. Unfortunately, no blanks were taken after detecting the pura explosives during the preliminary trials. consequently, the results form the preliminary test on the pure explosives may be misleading.

## II. MARYLAND STATE POLICE AT BALTIMORE WASHINGTON INTERNATIONAL

On January 28, 1987, the field test of two explosive detectors took place. Equipment tested was the Model 97 from ITI and the Scintrex EVD-1. Personnel participating in the evaluation were: Captain Larry E. Hammel, Comdr., MSP Airport Division; Lt. Robert L. McWhorter, Assist. Comdr., Airport Division; Sergeant Kenneth Chartrand; Tfc. Ronald Price; Deputy Chief Allen L. Ward and Deputy Fire Marshall Richard G. Labrocco.

The test consisted of searches aboard aircraft, on the tarmac and of motor vehicles. Additional searches were conducted inside the terminal building and included those of pay lockers and hold room (pre-board) areas.

Continental Airlines Manager, Orlando Berry, provided a DC-8 aircraft for the exercise. Due to the short term availability of the aircraft, both the Model 97 and the EVD-1 were evaluated alternately. About a half a dozen bags were placed in the first class seats and overhead baggage area. One of these bags contained sheet explosive and another contained detonator cord.

Tfc. R.E. price searched the aircraft first with the Model 976 and then the EVD-1. The searches were monitored by Deputy Chief Ward, who recorded the results for each machine. Following the on-board search activity an attempt to detect the explosives by sampling air discharged through the "dump valve" was made. This entailed sampling air discharged for the aircraft at an external port (dump valve).

Other bags had been lined up on the tarmac, one of which contained C-4 explosive and another TNT. Again each bag was scanned by Tfc. Price using the Model 97 and by Sgt. K. Chartrand using the EVD-1.

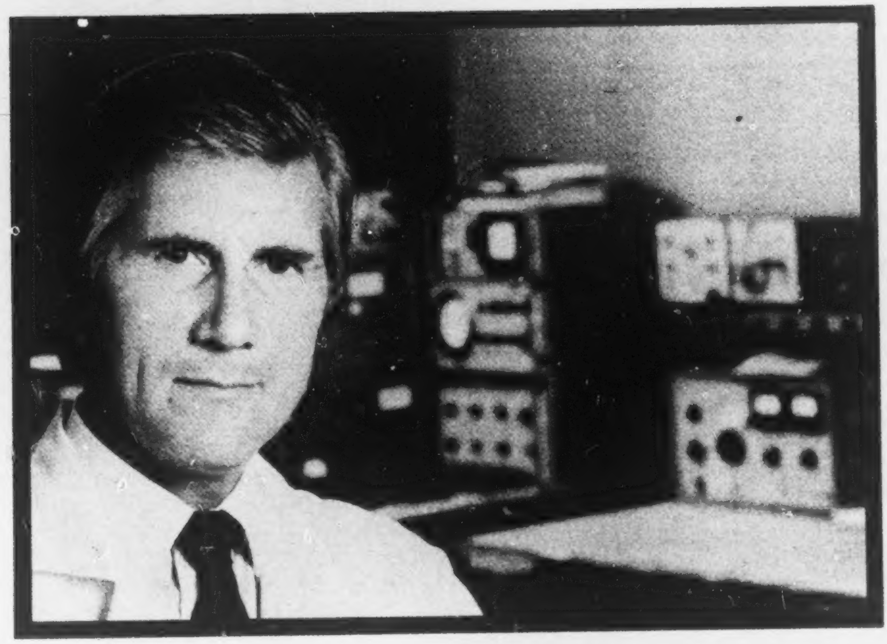
The Evaluation Committee found the Scintrex EVD-1 to be unsuitable for its intended use at BWI Airport. This is due to the inherent operational limitations of the equipment. While as reliable as the ITI Model 97, it was found to be too slow since it is a sample and analyze type instrument. It was subject to human error and to require manpower resources for operation which are not feasible.

The Model 97 was found reliable under a wide variety of conditions. It is fully portable and can be deployed upon short notice by a single operator. Operation is simple enough to permit all police personnel to operate it with minimal training.

> The Model 97 renders immediate analysis since it is a continuous testing instrument. This permits the searching of a large number of articles within a relatively short time. It enables the operator to identify the specific article, area, etc., emitting the suspect vapor, thus eliminating confusion and additional hand searches.
>
> The Evaluation Committee concurred that continuous screening is an essential capability of any explosive detections equipment and was unanimous in its findings and recommendations of the Ion Track Instruments, Inc., Model 97 explosive detector for deployment at BWI Airport.

Other tests have been conducted for the detection capabilities of the Model 97 by organizations such as Aramco Oil Corporation of Houston, British Petroleum and Stone and Webster Engineering. These particular test haven't been presently released. All of the above have reported excellent results for the Model 97 and 85.

# SUBSTANCE DETECTION RESEARCH



iTi

# DETECTION RESEARCH

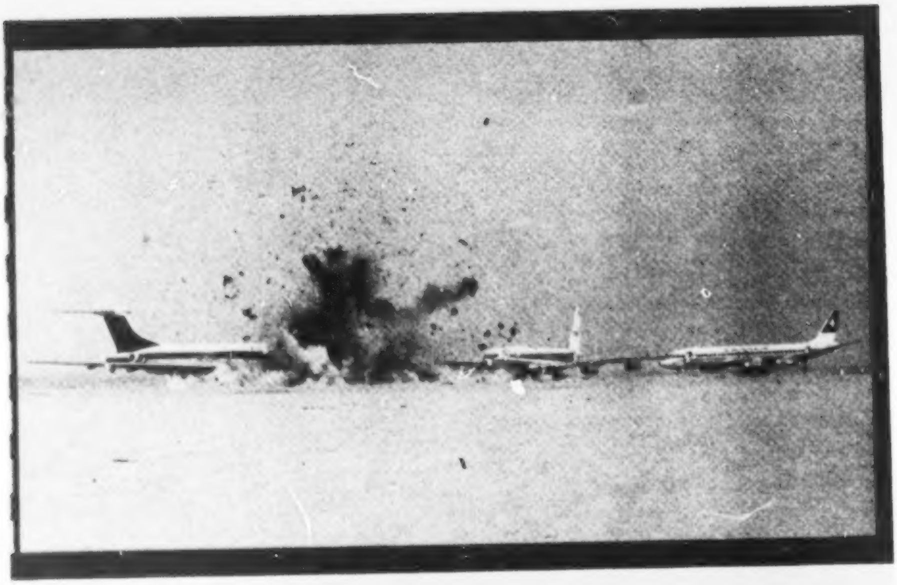
Over the past 15 years, ITI has built a reputation as the foremost source for solutions to difficult detection problems. The U.S. and British Governments have turned to ITI routinely for help in detecting concealed explosives. ITI's involvement with government security applications has resulted in the development of the world's first portable explosives detector.

Throughout the company's history, ITI has demonstrated a unique ability to deliver solutions. Scientists and engineers at ITI and affiliated UK Divisions have combined their expertise in electron capture technology, ion mobility spectrometry, thermionic ionization, vapor transport, and image analysis to focus on the detection, isolation and measurement of substances. This unique expertise and its focus on detection has resulted in ITI's preeminence in areas where material detection is a primary concern.

Currently, ITI security provides bomb protection for the U.S. nuclear power industry, the U.S. military, and several other high-risk organizations. Present research is directed toward walk-through and portable explosives detectors fast and sensitive enough for in-line use at airports, as well as toward research in detection techniques that incorporate new technologies.

ITI Industrial has applied its expertise in leak detection to enhance QA/QC activities. Electronics manufacturers, pharmaceutical packaging firms, defense contractors and many other organizations rely on the accuracy and speed of ITI's pressure decay and tracer gas leak detectors to verify and maintain the quality of raw materials and manufactured products.

ITI's image analysis technology is another tool developed to provide detection and identification of difficult materials and conditions. At ITI's Optomax Division, the company's expertise in automation, imaging, and image analysis is being used to provide custom-designed, high-speed, visual inspection and measurement tools for research and industry. New, computer-based products incorporating advanced operating systems are being utilized to meet the increasing demand for cost-effective instruments of exceptional versatility.



# EXPLOSIVES DETECTION

No other company can offer greater expertise in the detection of explosives than ITI. ITI's expansive expertise in vapor trapping and transport, electron capture, and ion mobility technology are the basis for a range of products that have earned ITI its position as the primary supplier of bomb detection systems worldwide. In addition, ITI-developed products have become the standard issue for explosive detection by the U.S. Army.

Currently, ITI is developing a fifth generation of bomb detection technology. Additional research undertaken by ITI at the request of the Federal Aviation Administration and other agencies addresses the pressing need for fast and accurate detection of an ever increasing number of explosives used by terrorists and criminals. As part of this on-going effort, ITI belongs to the MIT Industrial Liaison Program and is positioned to draw on a broad spectrum of government and private information resources and subcontractors.

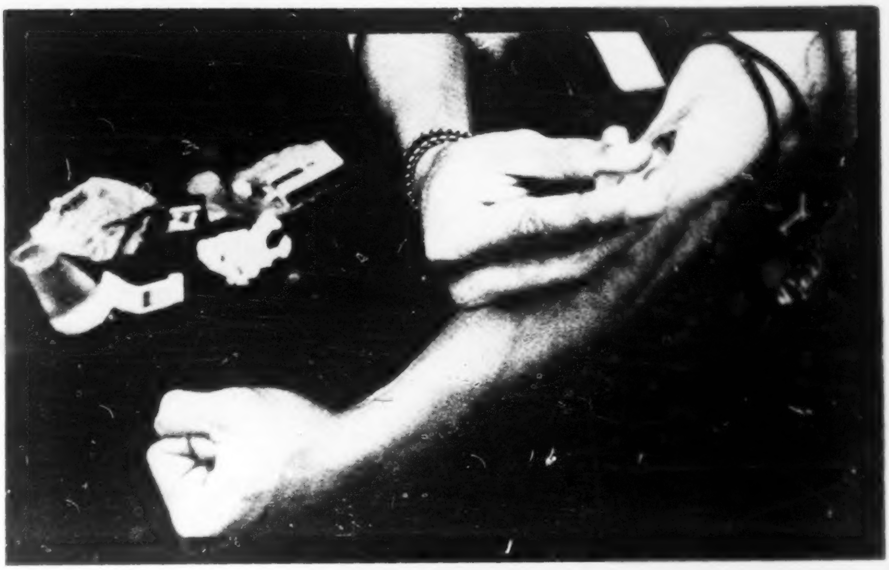
In each research effort undertaken by ITI the company has applied their extensive capabilities to successfully solve complex detection, measurement and analysis problems. The following pages provide more in-depth information on industries and applications where ITI has developed unparalleled expertise. We encourage you to contact ITI concerning your project or application.

## CHEMICAL WEAPON DETECTION AND IDENTIFICATION.

Chemical agents: nerve gas, blistering agents, choking gases, and substances that attack the blood are among the most frightening weapons in existence. The need to defend against these "invisible" weapons is of international concern. ITI's experience in ion mobility spectrometry and vapor trapping and transport have made the company a logical choice for the research and development of products to detect and identify chemical weapons.

ITI researchers are currently at work developing effective means to:

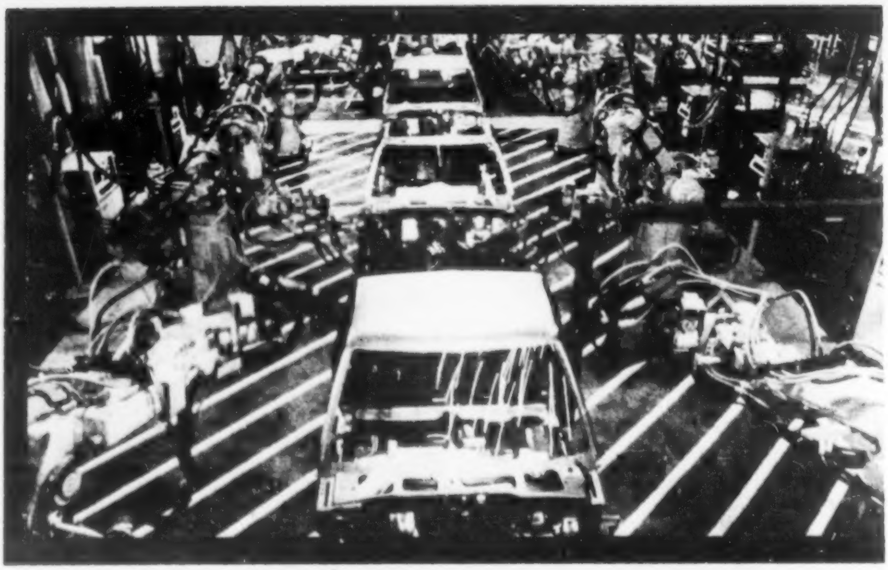
- identify chemical agents
- test the effectiveness of defensive materials against chemical agents
- provide contamination control for equipment and personnel after exposure to these substances.



# DRUG DETECTION AND TRACKING

The international demand for effective tools to interdict drugs and disband the organizations that distribute them is receiving priority attention from the scientists and engineers at ITT. By the application of both passive and active technologies ITT is developing products that quickly detect and identify controlled substances. These new products and methodologies will expand the search and seizure capabilities of drug enforcement groups by quickly and effectively locating drugs concealed in cargo, buildings, and on individuals.

Vapor detection, thermionic ionization, x-ray, particle scattering, and near field dielectrometry technologies are being refined to detect and identify drugs. ITT is also developing tools to locate and identify the drug traffickers at the highest levels. Law enforcement authorities can look forward to having tools that will not only detect contraband but more importantly will be able to trace the drugs to their source. This capability will facilitate not only stopping the flow of these substances but also in identifying the kingpins behind this international menace.



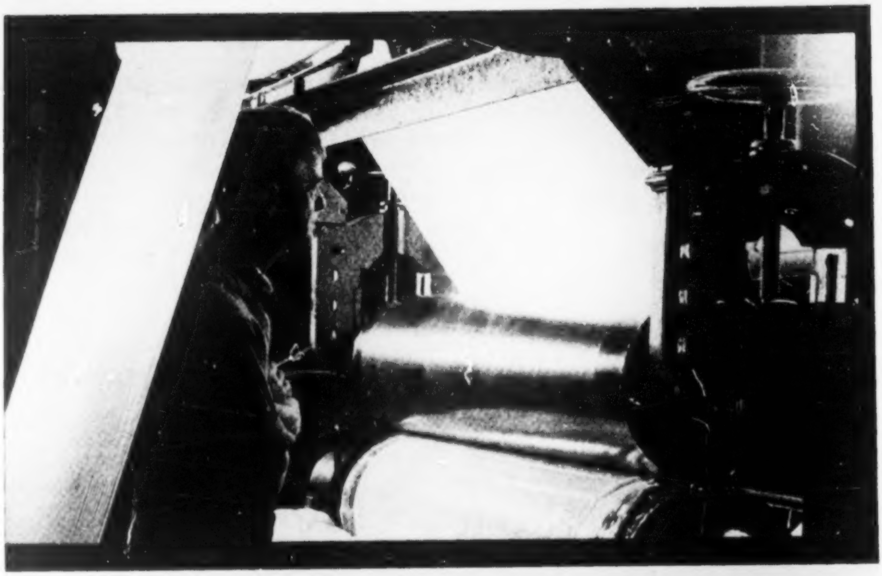
# LEAK DETECTION

ITI's expertise in pressure decay and tracer gas leak detection is the best in the world. Utilized to verify the integrity of seals, enclosures, packages, and vessels, ITI has developed a diverse client base for their custom-designed solutions to manufacturing problems involving the detection of leaks.

For production-line applications, ITI engineers have developed systems that incorporate microprocessor technology to provide manufacturers with defect profiles and statistical process control data for real-time process and quality control.

For field applications, ITI has worked with customers to develop highly sensitive portable leak detectors that combine high reliability with rugged durability.

Applications research in one case produced ITI's Model 120 Leakgun, which can trace one part $SF_6$ in $10^{[illegible]}$ parts air. Another breakthrough product allowed a manufacturer to implement non-destructive testing of a delicate product where 100% inspection had been previously impossible due to time and cost constraints.



## QUALITY DEFECT DETECTION

ITT's OPTOMAX Division shares the corporation's focus on developing solutions to problems in detection, measurement and analysis by developing solutions based on its image analysis and machine vision capabilities. This technology is based on high speed image capture and analysis of television images. Fast analysis software routines can be readily configured to meet individual applications and provide turnkey automatic inspection and measurement systems. These techniques have been employed to meet the needs of quality testing in the paper and pulp industry by inspecting and evaluating paper samples for the number of contaminants dispersed over a a sheet. Another Optomax application permits "in-line" visual inspection to detect particles in a slurry as it moves through a pipeline. Special illumination techniques and electronic shutters were developed to capture images on a repetitive sampling basis.

Products currently under development at Optomax are directed at automated manufacturing techniques for the factory of the future. These new products provide real-time, in-line process monitoring and extensive statistical process control data via image analysis techniques.

ITT is proud of their experienced and dedicated engineering staff who have achieved an impressive and successful record of solving difficult detection problems.

Mr. **Oberstar**. Our final panel today, should get the subcommittee award for patience, Mr. Arik Arad, General Manager, International Consultants on Targeted Security; and Mr. Steve Gardella, Jr., Consultant, Strategic Security Services, Incorporated, an acquaintance of several years standing who enlightened this member and other members of the Subcommittee on Investigations and Oversight on various aspects of airport security and airline security, and has the distinction of single handedly having stopped an airport takeover, with great risk to personal life, showing enormous personal courage, and skill. That makes you an all the more credible witness.

Mr. **Gardella**. Thank you. Thanks for remembering. No one else does.

Mr. **Oberstar**. I have never forgotten. It was very graphic testimony, which we received in Executive Session.

Mr. Gardella, we'll start with you.

## TESTIMONY OF STEPHEN L. GARDELLA, JR., CONSULTANT, STRATEGIC SECURITY SERVICES, INC.; AND ARIK ARAD, GENERAL MANAGER, INTERNATIONAL CONSULTANTS ON TARGETED SECURITY

Mr. **Gardella**. Thank you very much for inviting me to be here. Like everybody else, I've been sitting here most of the day and listening to most of this testimony. Mine might be covering the same subjects, but I want to be limited. We have some well known people here that are more articulate than I am, and my mentor, Dick Lally, and the other people from the FAA will probably help me to some extent.

But what I do want to tell the committee, in coming here, there are certain areas that should be addressed immediately and I have some solutions, I believe, that would enhance the security for airlines. I noticed today, also, that the FAA was getting quite a beating and unnecessarily so. However, I don't think that the FAA is a business organization and can respond like they want to respond because of the politics involved. And I don't think the FAA should be beat up over that.

Behind me also is Dick Lally from ATA, who's been the articulate catalyst with the airlines, and does a tremendous job. But I think he is under somewhat constraints. Also behind me is a man by the name of Homer Boynton, formerly of the FBI, and does American Airlines a very fabulous job.

But the areas that I'd like to address here is number one, is card access. And that's been discussed quite at length. I think that the system that is in process today is one that is deplorable because 10 years ago when I was in the industry, we recommended another system, one that the Armed Forces uses, that is one of the best and still used today. And it fell on deaf ears.

The other area that I would like to elaborate on by questions is explosive detection. As you know, Congressman, I'm also a consultant to SAIC, and a few other organizations.

My main concern here tonight, where I think something should have been yesterday, and it should be implemented tomorrow, and it was not mentioned today. And that is our air freight system.

There's an FAR 109, 109 states that a freight forwarder must have a standard security plan and be able to screen those packages going into the belly. And I am almost a person of positive feeling that if an explosive device is going to be implemented it's such an easy way to do it, not by some martyr getting on an aircraft. Now since this has been in existence since 1979, I don't think the FAA has been held accountable with freight forwarders and asking them, what is their security plan. If we're going to do something in the United States and internationally by freight forwarding, I think that it should be taken care of as a top priority by the FAA today. And every piece of freight should be examined. And I think the method right now, until it's implemented, should be by x-ray. I think that they should be held accountable, not that we're going to put it off on some planning in the near future. I want accountability today.

Mr. **Oberstar**. I fully agree with that. I had written a note to myself when the FAA was testifying earlier. I just wrote the word Combi, question mark. Combi aircraft are in high use by European carriers. For those who aren't familiar with the term, it simply means aircraft that are combination. They carry passengers and a high percentage of freight. And the European carriers have learned that there is big money to be made in carrying both passengers and freight, and those Combi aircraft are in increasingly greater use by our European carriers, and are therefore very vulnerable. It's very easy, it seems to me, to plant a device in that freight, and that isn't going through these extensive checks, as we've been discussing today with passenger luggage.

Mr. **Gardella**. That's correct, sir.

There was a comment made by a well known New York attorney, that came out in the law journal that really bothers me and I wanted to say it maybe 22 times when I heard all this testimony. And he states, he doesn't have to have the gift of proving negligence, it's always there. Now, if we're operating with negligence every day and making these attorneys rich, I think it's about high time we stop it and put them out of work, in getting to do our job, number one, by being smarter and being productive. And there are ways to do it without having big cost overruns and doing a lot of things.

One of the things that the FAA needs today, and I shared it with Monte Belger because at least he listens to me, he don't answer my letters, he don't answer any telegrams, but least we had some dialogue out here. And they need consultants. There is no substitute for experience. You've got people on the outside that were with the airlines that have retired that are just biting at the bit to come in to help in every respect, that have handled the situations before, not a hypothetical situation, not an armchair quarterback. It's time to use the consultants. Big corporations use them. In fact, I do very well being a consultant.

The other thing that's needed immediately is certification of the pre-board screener. About two years ago in your office, I think we brought it up that we should have an academy. Dick Lally took hours and hours, and hours, while I was with the airlines and put a program together for this type of certification. And there were other people on his task force that assisted him, and it wasn't even accepted. And the work that Dick Lally did for the industry to implement this certification, because in my private sector, as you well know, I do the security for the San Diego Chargers, professional golf tournaments. But we implement a training program to address those systems. So I think definitely that that has to be on the forefront.

My other big beef, using my vernacular, that I think should be implemented right away, and I brought it to your attention once before, and I just brought it to Monte Belger's attention here. Every air carrier servicing the United States, a domestic carrier, should have a professional security officer with them. If the railroads are doing it, why in the hell aren't we doing it here today? ATA only represents, I think 23, maybe 28 air carriers. Today, I think the count is right, that we have 160 certified passenger carriers. And I think the FAA could do some exact figures on that.

One of the final things that I'd like to bring to the committee's attention is the fast packages. And through Astrophysics Research, they loaned me an x-ray, and through the cooperation of U.S. Air, and I hope maybe Congressman Oberstar, you call up Colodny and tell him thank you for at least doing this experiment in Los Angeles. We are taking packages from curbside check-ins on fast packaging and running them through an x-ray. You have no idea what is coming through there. Now, from the freight, from Lieutenant Lang of the Bomb Squad, of L.A., not too long ago, they got 36 hand grenades coming through the freight end of it. Now what does that tell you? It tells us a lot, that we're not looking where we should be looking. We know that that freight was destined for Philippine, and the bomb people that support the airlines should be here testifying here also. But from that project, from 90 days, I hope we will get such a learning curve, and I shared that with Monte. And I think that he's going to address that situation.

One of the other things that happens to a person like myself after you leave the airlines and you do consulting work, I have been contacted by CBS, NBC, ABC, and all the affiliates to them, to reveal inadequacies to assist them. And if you did that, and if I would have gone along with that, it would have just created a disaster. But let me tell you, right today, even what happened in Burbank, California two weeks ago, where there was no one on duty, and everybody walked to the aircraft, it created havoc. Now those people are out here searching today, for some loophole to find that. And I think that is grossly wrong. And Dick Lally has addressed that in many situations, to stop it.

Also, in the law journal, which I became a reader of, not because I'm an attorney, but another comment was made, and I've got a copy of that law journal where there's 27 distinguished attorneys now in the aviation law business. And I can show you their pictures here if you'd like it. One of the attorneys had come up and said, now, we may be not looking at the Warsaw Convention like we did years ago, because it's outdated. But now he's looking for an aircraft to be bomb worthiness. And he proposes, by the same token, by putting x-rays in the hold of the aircraft, so the pilot can see what's going on in the bottom. I imagine that's for heavy 747s.

There are a lot of things you can do, and I will say right now there would be no expense to the Government, and I don't think it would be too much expense.

Homer Boynton mentioned to me, and I kind of listened, because operationally that's his responsibility. You can bring in all kinds of technology today, but there are unproven situations come operationally. So when you do things of this nature, you want to be able to give it a test before you go out and spend $10 million on something.

But let me recommend to you what I feel could be implemented right today. And I've talked to the FAA about it, and like I say, I don't know what they've thought about it. In the pre-board screening process, every x-ray should have a video camera on it. Videoing what that comes through on the x-ray, looking at that package, looking at that person, looking at that cassette. And I've recommended it on explosive detection, that they do the same thing. When every bag is inspected, they should videotape that. After the flight is terminated, and you could throw the tape away, or either use it for a training purpose, but if they had that from Pan Am 103, you might have got some part, and I refer to the Congressman's law enforcement background—a part of the corpus delicti, you've got intelligence and you've got something to start working on that you can make an immediate change. And when you start that, I feel it would maybe cost in our domestic system, about $30,000 to $50,000 to video everything. At least now, the way our social system is dictating to us, when you make a police arrest for a drunk, you've got to video it. You're going to see more things happening and give you more intelligence where you've got the productivity.

And I would say in my closing comment, that from my perception, being a consultant, being from the airlines business and being retired three times, the airlines are doing the best they possibly can. And by the way, I'm still a marlin fisherman, and I'm back in the tournament in Hawaii May 10th. [Laughter.]

But there are a lot of things you could do right now. And when you sit here all day long and listen to this, I see too many excuses. And there's no sense for an excuse any more. And if I was at the helm—and you don't win by a war by excuses either. And if I was at the helm, I would start, number one, videoing everything that comes through, examining that freight forwarder where they could hold it a day if they don't know what's coming through, and at least you've done something that the public knows that you've gotten productivity and you're starting to create that safe environment which you need to do like yesterday.

Thank you very much, and I stand ready to answer any questions after my learned colleague here from another perception can give it to you.

Mr. **Oberstar**. Thank you very much, Steve. That's most helpful testimony, and very valuable insight into the testimony we've received today, and into the problem that we're confronting. We appreciate that very, very greatly.

Mr. Arad.

Mr. **Arad**. Chairman Oberstar.

Mr. **Oberstar**. Thank you again for being with us, and look forward to your testimony.

Mr. **Arad**. Thank you very much for inviting me. Good evening. I'll try to make it as short as possible.

I was formerly the El Al Director of Security in Canada, and Director of El Al Security at Israeli's International Airport. I'm currently the Managing Director of ICTS (U.S.A.), Inc., a security consulting firm. We design and implement aviation security programs for several major U.S. carriers, among other services we provide.

I'd first like to distinguish between international and domestic airports and flights. There is a difference, and therefore, the level of security should be addressed differently. While international flights are of great concern, governments, in my opinion, should not ignore domestic issues.

With regard to international flights to the States: I believe that all carriers, both U.S. and foreign, should be required to implement laws and standards established by the U.S. government. Since U.S. passengers are the target, and since U.S. passengers fly all carriers, security and safety standards should be the same.

I've heard today references to R&D and better technological equipment in production. In my personal opinion, equipment and technology under discussion here today would not detect or stop terrorists. Aviation security must rely on the human factor, and complemented by equipment. We have to remember, terrorists are always a step ahead of us. Further, one needs highly qualified personnel to operate those machines.

A good comprehensive aviation security program should cover all the different potential options the terrorists could use: handbags, suitcases, commercial cargo, mail, maintenance, catering and other services used at airports and by airlines, as well as other ways of direct attacks. To achieve this, we should apply the following: proper transfer of information and intelligence to the proper security coordinators. We need qualified security personnel with proper in-depth training covering a wide variety of security issues, trained according to preset requirements that have to be established by the U.S. Government. We need to introduce better salaries and incentives to security personnel; pre-employment screening of all airline employees and airport employees with access to the aircraft; to introduce the El Al concept or the ICTS concept based on the El Al principles known as the profile system (which checks all passengers and all items prior to loading aircraft, including commercial cargo, mail, catering and all other maintenance, fuel, water, food, et cetera). The profile method allows us to classify and categorize both passengers and other items.

The last thing is to have proper procedures for interaction with all related authorities at the airport, so that in case of information or event all parties act accordingly.

With regard to domestic, it is essential, in my opinion, simultaneous with all measures taken in the international arena, to carry out an in-depth security study of several U.S. airports with the objective of establishing nationwide security procedures and determine ways and means of operating the present security system. It's important to establish airport security mechanism at airports now as preventive measures, not wait for an accident to occur, and then react.

Last remark about El Al. I've heard today, here, remarks that El Al has only 20 airplanes, and that it is a national carrier. It is true. However, it has got nothing to do with what we're talking today. I emphasize that the company I'm directing today has applied the El Al concept and principles to several major U.S. carriers and I can assure you that both passengers and the airline welcome and appreciate the system.

On the other hand, it is important to emphasize that all the various security consultants that are suggesting that the Pan Am Airline should have adopted the El Al security system, as it is exactly, are totally wrong. It is impossible. Each airline, each airport should be analyzed individually, and according to the specific evaluation, then establish a security program.

Thank you.

Mr. **Oberstar**. Thank you very, very much. I think your recommendations are right on target. I appreciate, particularly, your perspective and your insights on El Al. I think that's very helpful to have those insights, and as you said, in effect, to set the record straight, the El Al security system is certainly held as the example, the ultimate in security for the modern day threats that air travel faces. And your example and your experience have been very, very instructive, and we appreciate that immensely.

Mr. **Arad**. Mr. Chairman, can I just make one statement please?

Mr. **Oberstar**. Yes.

Mr. **Arad**. The El Al system applies to Israel and El Al. I've heard so many people trying to say that maybe we, U.S.A., should adopt the El Al methods. It's impossible. It cannot do exactly what you do for El Al. It's not worth it, it's not visible, it's not logical, it's unrealistic. I suggest the company I'm directing has taken the principles and the concept from what El Al is trying to accomplish, and adapted it for the past year and a half for major U.S. carriers. It works perfectly as far as those airlines and myself are concerned.

Mr. **Oberstar**. I think that is most helpful as we proceed through this whole process. It's a very helpful insight. Thank you.

The Chair recognizes the gentleman from Iowa, Mr. Lightfoot.

Mr. **Lightfoot**. Thank you, Mr. Chairman. And thank you, gentlemen, for staying with us this late. Either you're dedicated, or somebody up here owes you money. I don't know which.

Mr. **Gardella**. Dedicated.

Mr. **Lightfoot**. Dedicated. That's good.

One thought, Mr. Gardella, you were talking about video taping all of the baggage as it goes through. One thought occurred to me, you probably could sell those to Ted Turner, and he'd colorize them and then we'd get Merv Griffin and start a new show called name that bag or something. Someone would find some use for it, I'm sure. [Laughter.]

Is maybe the key to a lot of this security situation, what Mr. Arad was just referring to, that each airport is different, and each airport offers a different set of circumstances, different physical plant, location, all those things that are involved, and historically Federal legislation has a problem in dealing with anything that's different. We tend to, on a farm bill or whatever, everything is, you know, in Federal terms everybody's the same, and they never are. But that's the way we put things together. Is that an area that we need to be very, very conscious of as, and when and if it is put together from a Federal standpoint, that we do allow the flexibility for those differences from airport to airport, and situation to situation?

Mr. Gardella.

Mr. **Gardella**. Well, being with the airlines and understanding their problems, and somewhat dealing with every airport operator, yes it is a problem to some degree. But the only thing that really has to be addressed either by the FAA or ATA is communication. If you had communication, you wouldn't have the problems, and the Catch-22 situations that you have today.

Believe me, when I tell you, when I served as the vice president of PSA, we were known when we started out—and we've been hijacked 12 times—the communication was so small. I had to gather it from other sources. Intelligence gathering has been discussed by Dick Lally, and by Ray Salazar on numerous, numerous occasions. Now, I don't know what's happened in the last year, but I could talk to you for another two hours on it.

But to answer your question, the problem is not that great to address in our domestic system. All you need to do is communicate and have an accountability. For instance, and I've been deposed for nine hours straight over the PSA crash with U.S. Air, and that's an unpreventable act. I don't care what you did, in any circumstances. But there is no accountability on ID cards. You can go to any air carrier today, and you go to that airport and you can pull out the air carriers' ID card, and I was issuing ID cards like it was going out of style, and you lost it, no biggie. But if you would have an accountability and communication, you would not be faced with a lot of these hearings and problems. They can be addressed. Along later comes the technology. And the only catalyst that we had in the industry was through Dick Lally and the Association. If he didn't tell us to keep it straight, we'd have nothing. Those things have got to change, because society is demanding more of an accountability from you gentlemen, from consultants, in the security posture as it is seen today.

And in the private sector, I would be in the homeless if I had to operate the way they do. You can't do it, because they don't tell you anything.

Mr. **Lightfoot**. I'm getting two messages, as far as communication is concerned, are you talking within an airline company, and between companies and between the Government, or is it the whole gamut, or——

Mr. **Gardella**. Between the Government, between the Government.

Mr. **Lightfoot**. And the companies?

Mr. **Gardella**. And the companies. And I don't know how it stands in the last year, you'd have to address that question to Dick Lally. But I do know when I get the call when something goes wrong, like from an attorney, and it all comes back down to communications at a specific airport, with a specific airline. And right now, to this day, and I have no qualms about saying it, because I consider Salazar and Belger my friends. They don't communicate. And I, for six months, have sent letters and I've sent telegrams.

Mr. **Lightfoot**. I don't know how else to put this, but is the breakdown on the communication, is it because of bureaucracy? Is that where it is?

Mr. **Gardella**. From my perception, being on the outside now, looking in, I still think that it is. However, you'd have to talk to Homer Boynton. He runs a big airline and a good airline. You'd have to talk to United, Bob Bauter, and you'd have to talk to Dick Lally. But some of the people are so afraid to tell what the truth is, that they're worried where the next paycheck comes from. I'm not in that category any more. And I could say what I believe to be letting truth prevail. And there are constraints what a person can really say.

But I do think, without articulating on that part, you've got some of the greatest minds today of all time in airline security, and airport management. And you don't use it to the extent that it can be used, in my opinion. And in a closed session if Homer would sit here and let his hair down, whatever he's got left, Bob Bauter, who doesn't have any, Dick Lally, and we sit in this committee and wring it out with Monte Belger and Ray Salazar, you're going to get productivity. But everybody's afraid to tell you what the real truth is. And I could expound on other areas, but as long as they're present, they're in the driver's seat. I'm coming in like the has been.

But I do feel by being here, that if they were allowed to communicate better, you will have a better security system. And I think many people can attest to it, because they sat here today, waiting all this time to hear what the hell I'm going to say. And when they knew that Oberstar was sending for me, I guess the moccasin teletype was all over Washington. What the hell is Gardella going to say.

It's got to be productive. And the time has come one more time—you got me started—one more time, Mr. Lightfoot, or Congressman, they've got to hang a big sign at the FAA, proactive instead of reactive. Last year the big comment was the theft was perceived from within, because some disgruntled employee did something. What about the highway patrolman in California that did something? That perception was a wrong perception, in my opinion. We still have the terrorists.

If you were in San Diego two weeks ago, and see what everybody went through with that Captain's wife with that bomb, we had almost a national chaos, knowing that there was terrorists in San Diego. My phone must have rung off the hook 38 times, what should we do. And I said, how in the hell do I know, get the police. Law enforcement should be sitting here.

And like I say, sitting right behind me is your greatest minds, use them.

Mr. **Lightfoot**. I appreciate that.

You can answer in an open session that wouldn't jeopardize anybody, what is the truth.

Mr. **Gardella**. What is the truth?

Mr. **Lightfoot**. Yes.

Mr. **Gardella**. For 21 years we've had the problem of airline security. You've got 160 certified carriers, what I alluded to a little before, and it's about time that the FAA comes up with a regulation saying that every air carrier have a professional security officer. You've got more air carriers that don't belong to ATA that are flying passengers, and haven't got any input at all. You need that right now. You need people that can give you answers and create that safe environment. You've got people now, even with the ATA, if you open up their directory, that are in charge of fuel and security. Every chief executive officer should be held accountable, because security can no longer be at the bottom rung of the ladder. It better be on the top.

Now, my two young twin granddaughters have been chosen as Olympic development people, and if they're going to be flying around and we haven't done nothing, and they're going to be going to Europe, maybe Barcelona if they prove themselves, I'd be scared to put them on an airline the way we operate today. Every bag should be examined by x-ray. It should be videoed, and then you get all these other things—and I'm becoming repetitious. Let them start speaking. They're running the industry today.

From the outside, and I could speak openly, I could see many programs. The thing you do, and I always say this because I have 700 employees in my company that I just sold, you pay peanuts, you get monkeys. And that's what's wrong today. You need a training academy. And I could start one in two weeks, and everyone that supports the air carrier, and it's about time the airlines started seeing that they've got to do a better job. You've got people today that can't even speak English, much less be a citizen. And I got in all kinds of trouble when I turned down artistic people in Phoenix, when I was with the airline, saying they can't do the job. Man, I was tackled right away by some legal definitions that we're going to sue you.

But I'm saying this for the fourth time, Congressman Lightfoot, you've got Ray Salazar, you've got Monte Belger, they're good men. Make them work. And make them answer and be accountable. They want to be, but maybe politics are involved where they can't be. You've got Dick Lally, you've got all these other guys, you could have the best system in the entire world, but you're not using them right in my opinion.

Mr. **Lightfoot**. I appreciate your comments and your candidness——

Mr. **Gardella**. I get excited.

Mr. **Lightfoot**. Never noticed it from here. [Laughter.]

Mr. **Gardella**. Thank you.

Mr. **Lightfoot**. Thank you very much for being with us and sticking with us this late in the afternoon.

Mr. **Gardella**. I'll stay another week if you want.

Mr. **Lightfoot**. Talking about the English, I understand that the Smithsonion has a bounty out for an English-speaking cab driver here. If we find one, we're supposed to kill him and have him stuffed, they're going to mount him over there. If that pertains to what you're talking about, I'm not sure, but again, we do appreciate your coming very much, and when we have that closed session, that may be a good opportunity to get some of these things ironed out.

Mr. **Gardella**. I'd come back again on a closed session.

Mr. **Lightfoot**. Thank you.

Mr. **Payne**. I'd like to end the hearing on that note, then, Mr. Gardella, and we appreciate very much you and Mr. Arad being here as our final panel of witnesses. This hearing has certainly been very informative for all of us and I think the record will be of great interest to all of our members who weren't able to attend all the hearings. But I want to thank you very much.

I need to make an announcement that the subcommittee will not meet in Executive Session this evening, but will reschedule probably Thursday morning, and we will be in touch with the appropriate people to confirm that.

Thank you all again or staying until such a late hour. This hearing is adjourned.

[Whereupon, at 7:25 p.m., the subcommittee was adjourned, to reconvene at the call of the chair.]

# AVIATION SECURITY

TUESDAY, APRIL 25, 1989

House of Representatives,
Subcommittee on Aviation,
Committee on Public Works and Transportation,
*Washington, DC.*

The subcommittee met, pursuant to notice, at 10:19 a.m., in room 2167, Rayburn House Office Building, Hon. James L. Oberstar (chairman of the subcommittee) presiding.

Mr. **Oberstar**. The Subcommittee on Aviation will please come to order. Before we begin, I would like to insert into the record at this point a Summary of Subject Matter for today's hearing, and a copy of the bill, H.R. 1659.

## SUBCOMMITTEE ON AVIATION

HEARING AND MARKUP
ON H.R. 1659

TUESDAY, APRIL 25, 1989
10:00 A.M.
2167 RAYBURN HOUSE OFFICE BUILDING
and
WEDNESDAY, APRIL 26, 1989
10:00 A.M.
ROOM TO BE ANNOUNCED

## SUMMARY OF SUBJECT MATTER

The Subcommittee will hold hearings and a mark-up on H.R. 1659, the Aviation Security Act of 1989. The Subcommittee previously held two days of hearings on aviation security problems, and the attached Summary of Subject Matter providing background information was circulated on March 18. This Summary provides information on developments since the previous security hearings.

I. Recent DOT Actions - On April 3, The Department of Transportation announced the following series of measures to deal with security problems.

1) U.S. airlines will be required to install and use explosive detection systems such as thermal neutron analysis (TNA) units at the busiest airports in the United States and overseas. Beginning April 24, Secretary Skinner will personally go to Europe to negotiate with foreign governments to ensure that there can be speedy installation of explosive detection systems at foreign airports.

2) Additional FAA aviation security specialists will be deployed to provide greater surveillance and assistance to U.S. carriers operating at the busiest airports in the United States and overseas.

3) Improvements in the FAA security bulletin process will be made including:

   a) making compliance by U.S. Carriers with these directives mandatory;

   b) requiring carriers to acknowledge receipt of bulletins within 24 hours;

   c) requiring carriers to submit to the FAA within 72 hours specific information on how they plan to carry out measures required by security bulletins; and

d) requiring that specific information in security bulletins be distributed to pilots in command .

4) The standards in x-ray and metal detection equipment used by U.S. carriers will be upgraded to ensure that state-of-the-art equipment is being used.

5) A national aviation security advisory committee will be formed, chaired by FAA, to provide a forum for the exchange and coordination of security programs and research and development.

6) A thorough review will be conducted by FAA of how well U.S. carriers are complying with security requirements.

7) Efforts will be made to develop new procedures for foreign governments and the U.S. government to effectively coordinate security information and countermeasures.

II. H.R. 1659. H.R. 1659, introduced by Chairman Oberstar provides the following:

Section 1. Short title - "The Aviation Security Act of 1989."

Section 2. Installation and Use of Explosive Detection Equipment. The bill provides that not later than 60 days after the date of enactment the Administrator shall require all United States air carriers to install and use explosive detection equipment as expeditiously as possible. The equipment must meet standards equivalent to or better than thermal neutron analysis technology. The equipment must be used by United States carriers at the foreign airports which have been subject to extraordinary security requirements (45 airports in Europe and the Middle East) and at other United States and foreign airports where the Administrator determines that use of the equipment is necessary to ensure the safety of passengers.

Section 3. Aviation Security Assistance Programs.

(1) The bill gives the FAA Administrator authority to make grants from the Trust Fund to pay the costs of air carriers acquiring explosive detection equipment required under Section 2 of the bill. The amount of funding available is $100,000,000. Up to $50,000,000 may be obligated in Fiscal Year 1989 and the remainder of the $100,000,000 may be obligated in future fiscal years. This authority is contract authority and grants can be made without any appropriations legislation. Appropriations legislation could include an obligation ceiling which would limit the grants which could be made in a particular fiscal year. However, the bill provides that obligation limitations shall not apply to the contract authority granted by the bill.

(B) The bill also grants the FAA Administrator authority to make grants to airports to pay the cost of the airport acquiring and installing equipment used to comply with FAA regulations on controlling access to secured areas of the airports. The funding available is $170,000,000 of which not more than $85,000,000 may be obligated in Fiscal Year 1989. This authority is contract authority subject to the same provisions as are discussed in item 1 above.

I

101st CONGRESS
1st Session

# H. R. 1659

To improve aviation security by requiring the installation and use of certain explosive detection equipment at certain airports located outside the United States and by providing assistance for the acquisition of such equipment, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

April 3, 1989

Mr. Oberstar introduced the following bill; which was referred to the Committee on Public Works and Transportation

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# A BILL

To improve aviation security by requiring the installation and use of certain explosive detection equipment at certain airports located outside the United States and by providing assistance for the acquisition of such equipment, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

### SECTION 1. SHORT TITLE.

This Act may be cited as the "Aviation Security Act of 1989".

## SEC. 2. INSTALLATION AND USE OF EXPLOSIVE DETECTION EQUIPMENT.

Section 315 of the Federal Aviation Act of 1958 (49 U.S.C. App. 1356) is amended by adding at the end thereof the following new subsection:

"(c) INSTALLATION AND USE OF EXPLOSIVE DETECTION EQUIPMENT.—Not later than 60 days after the date of the enactment of this subsection, the Administrator shall require all air carriers to install and use, as expeditiously as possible, explosive detection equipment which meets minimum performance standards requiring application of technology equivalent to or better than thermal neutron analysis technology—

"(1) at airports (A) which are located outside the United States, and (B) at which the Administrator has determined, on or before such date of enactment, that air carriers must use extraordinary security measures; and

"(2) at such other airports (whether located within or outside the United States) as the Administrator determines that the installation and use of such equipment is necessary to ensure the safety of air carrier passengers.".

## SEC. 3. AVIATION SECURITY ASSISTANCE PROGRAMS.

The Airport and Airway Improvement Act of 1982 (49 U.S.C. App. 2201–2227) is amended by adding at the end thereof the following new section:

### "SEC. 535. AVIATION SECURITY ASSISTANCE PROGRAMS.

"(a) AIR CARRIER SECURITY ASSISTANCE PROGRAM.—Subject to such terms and conditions as the Administrator may establish, the Administrator is authorized to make grants from the Trust Fund to air carriers required to install and use explosive detection equipment under section 315 of the Federal Aviation Act of 1958 to pay up to 100 percent of the cost of acquiring such equipment.

"(b) AIRPORT SECURITY ASSISTANCE PROGRAM.—Subject to such terms and conditions as the Administrator may establish by regulation, the Administrator is authorized to make grants from the Trust Fund to sponsors of airports to pay up to 100 percent of the cost of acquiring and installing equipment used to comply with regulations issued by the Administrator for controlling access to secured areas of airports.

"(c) FUNDING.—

"(1) AIR CARRIER SECURITY ASSISTANCE PROGRAM.—The amount available for carrying out subsection (a) shall not exceed $100,000,000, of which not more than $50,000,000 shall be obligated in fiscal year 1989.

"(2) AIRPORT SECURITY ASSISTANCE PROGRAM.—The amount available for carrying out subsection (b) shall not exceed $170,000,000, of which not more than $85,000,000 shall be obligated in fiscal year 1989.

"(3) CONTRACT AUTHORITY.—The Administrator is authorized to incur obligations to make grants from funds made available under this subsection. Notwithstanding any other provision of law, approval by the Administrator of a grant with funds made available under this subsection shall be deemed to be a contractual obligation of the United States for payment of the Federal share of the cost of acquisition of equipment.

"(4) INAPPLICABILITY OF OBLIGATION CEILINGS.—Funds made available by this subsection shall not be subject to any obligation limitation.".

○

Mr. **Oberstar**. This morning, we resume our hearings on aviation security. This is a continuation of a hearing we initiated a few weeks ago into this very subject. Today's hearing is more specifically focused on legislation introduced as a result of the findings and information derived from that earlier hearing.

Ironically, and quite coincidentally, this hearing on security comes on the day on which a Korean court handed down a sentence of conviction, ordering the death penalty for a terrorist responsible for the death of 115 people aboard a Korean Airlines aircraft over Southeast Asia, a tragic reminder of how close to our actions are the realities of terrorism and its fatal and frightening consequences for those who travel in one of the most vulnerable modes of transportation—aviation.

The legislation I have introduced would require airlines to install and to use thermal neutron analysis technology at foreign airports, where extraordinary security measures are required, and at various domestic and other foreign airports selected by the FAA.

Under the bill, the airlines would be eligible for grants to acquire the equipment. We would provide $100 million, beginning with $50 million in the current fiscal year. The next focus is on airports, and airports would be eligible for grants to pay the cost of acquiring and installing equipment needed to provide the controlled access doors at key facilities in the airports, access to airport operations areas.

Both of these areas are targeted on key vulnerable aspects of aviation which were unveiled in the course of our very extensive inquiry into security. For the access door issue we would provide a total of $170 million, beginning with $85 million in fiscal year 1989.

There are a number of other issues that we are going to explore in the course of today's hearing, and we want witnesses to comment not only on the specifics of the legislation but other aspects of security, including the regulations issued by the Department of Transportation to tighten and strengthen security.

I also want to say at the outset, that while Secretary Skinner cannot be with us today—he is, understandably, and long previously, committed to a meeting on security issues in Europe—he has been an extraordinarily vigorous activist on this issue.

He did not wait for Congress to prod him. He did not wait for outside public concern to move him into action. He knew it needed to be done, seized the initiative, and moved with great speed and decisiveness, and I want to applaud the Secretary for his actions. He has been very forthright with this committee, and very open in his discussions with us. We have had a very fine, a very productive, and, necessarily, a cooperative working relationship.

I know that those who are here testifying on behalf of the Department, and for the FAA, will have the full confidence of, and be able to speak for the Secretary, and so his absence in no way diminishes the Department's standing and concern, and position on the issues.

There are a number of questions that we need to explore in this hearing, and some on which we may not ultimately be able to agree, particularly the funding. That is, how, and who pays? I think that is very important.

Are there other types of explosives detection technologies that can be, or should be required, in addition to TNA? Should there be more testing of ~~TNA and~~ other types of equipment, to determine what it can and cannot detect, and how those devices may be fooled by terrorists?

Should FAA be required to strengthen passenger and carry-on baggage screening procedures and standards? And to what extent should foreign carriers be made to comply with the security standards imposed on U.S. carriers?

Last year, Americans made 40 million trips abroad, spending billions of dollars. Some 26 million foreigners made 33.7 million visits to the United States. We have a $5.7 billion deficit, balance of trade, in tourism.

Now if our fellow citizens are traveling abroad and spending billions of dollars in foreign countries, the question is shouldn't they provide a level of security, and the same level of security that we insist upon in the United States, for our fellow citizens traveling abroad?

Finally, to what extent should airport operators be liable for security breaches by persons and companies doing business at their various airports? Those are critical matters. We are going to explore them at great length, but we do hope to move through this hearing and conclude early this afternoon.

I want all of our colleagues to be prepared to ask questions. I hope the questions will be concise, and the answers equally forthright and concise.

Now, the Chair would recognize the Ranking Minority member of the full committee, and welcome him to this hearing. He has taken a great interest in aviation, having served on that subcommittee for many years, and we welcome his strong and vigorous participation and interest. Mr. Hammerschmidt.

Mr. HAMMERSCHMIDT. I thank the Chairman for yielding the floor. Mr. Chairman, it is clear that despite efforts to improve security, violence and terrorism continue to threaten the lives and property of Americans traveling overseas, and the Pan Am Flight 103 dramatically brought home the need for improvement in airline and airport security.

Therefore, Mr. Chairman, you are to be commended for your quick action in introducing a bill that addresses this need. As we know, this bill would require airlines to install and use bomb-detection devices, like the thermal neutron analysis, TNA device, that was shown to us at our hearing last month.

And this device will detect the sort of plastic explosives that were used to bring down Pan Am Flight 103. It is important that we move as quickly as possible to install sophisticated bomb-detection devices at high-threat airports. The traveling public has every right to expect the increased protection this system can provide.

The U.S. Government has already spent $60 million researching and developing the thermal neutron analysis system. If it works as well as the FAA seems to think it does, then it is time to move ahead with this system, without delay. At the same time, we should recognize that there are other systems, such as the vapor detection system, that could be used to enhance security.

Perhaps it should be considered for immediate use as well. The one significant question that remains is, who should pay for the purchase and installation of these devices? I am certainly aware that there is a huge surplus in the Aviation Trust Fund that might be tapped for this purpose.

I have been as vocal as anyone here in calling for full funding of Aviation Trust Fund programs. However, under current budget and appropriations procedures, it is likely that any money spent on explosive detection devices will come at the expense of some other needed transportation safety programs.

Therefore, I hope we will carefully consider the impact of purchasing these systems with Federal money. In this connection, I would note that DOT has announced that it will require airlines to purchase explosive detection devices themselves, without additional Federal financial help.

And so, Mr. Chairman, I think we are moving expeditiously to address a problem brought to light by the bombing of Pan Am 103. If there are any differences, they are over the means, and not over the goal we all share, of improving airline and airport security.

So in this hearing, witnesses hopefully will address some of these differences, so that the bill we report out later this week will be as responsive to the problem as it can be.

Mr. Chairman, I will not get into this now in this opening statement, but you and I have discussed, informally, the idea of worldwide security, and how ICAO might be brought into the process, and as we develop this legislation, I hope that ICAO might be a mechanism where we might broaden even more the concept that you have developed so far in this bill. Thank you.

Mr. OBERSTAR. Thank you very much for your comments, and opening remarks, and I think that is a very important matter. And using ICAO, involving them in a broad, multi-nation, widespread effort makes good sense, and is a good security approach.

The gentleman from Pennsylvania. Mr. Kolter.

Mr. KOLTER. Thank you, Mr. Chairman. I just want to commend you for your determination in bringing this urgent matter of airport security before us, and, Mr. Chairman, in the interest of saving time I would submit my information for the record.

Mr. OBERSTAR. Without objection, the gentleman's statement will be included in the record at this point.

Mr. OBERSTAR. The Ranking Member of the subcommittee. The gentleman from Pennsylvania. Mr. Clinger.

[Mr. Kolter's prepared statement follows:]

### STATEMENT OF JOE KOLTER, MEMBER OF CONGRESS

I want to commend Chairman Oberstar for his determination in bringing the urgent matter of airport security before us in such an expeditious manner.

After hearing the hart wrenching testimony at our prior hearing from the families of the flight 103 victims, I think it is fair to say that we are all very aware of the urgency of this matter. From the testimony by those who deal so closely with airport security, it is more than apparent that drastic steps need to be taken to beef up airport security systems, especially at those airports which the Federal Aviation Administration deems security risks.

Through recent developments in detection screening technology, we have at our disposal the State-of-the-art equipment needed to improve our ability to stop terrorists before lives are in danger. Thermal neutron analysis units will soon be available for installation at many airports. Though these devices are costly, no cost is too high to ensure the safety of the flying public.

The legislation we will be marking up tomorrow, H.R. 1659, will do much in accomplishing our goal of the strongest airport security possible. And, if additional moneys are needed to further tighten security, it is this Member's feeling that we in Congress must appropriate whatever funds are necessary, for the issue of human lives cannot be compromised.

I offer Chairman Oberstar and Anderson my full support and assistance in furthering the ~~issue~~ of airport security.

Thank you, Mr. Chairman.

Mr. **Oberstar**. The Ranking Member of the subcommittee. The gentleman from Pennsylvania.

Mr. **Clinger**. Thank you very much, Mr. Chairman. I am delighted to once again be serving with you on a subcommittee in the Public Works and Transportation Committee. It is my first hearing. I am looking forward to my opportunity to participate in the deliberations of the subcommittee.

Mr. **Oberstar**. If the gentleman would yield, that is right—this is the first hearing that we have served together in the aviation subcommittee. The gentleman from Pennsylvania and I have been together on Economic Development, and on the Investigations and Oversight Subcommittee, and while there was a little hiatus, it's a delight to welcome the gentleman from Pennsylvania formally and publicly to the Subcommittee on Aviation. You have been a great partner, very thoughtful, and those in the aviation community and other colleagues on the subcommittee who are not familiar with Mr. Clinger's approach—I can assure you it is very thorough, thoughtful, painstaking, and extraordinarily objective and fair. A great partner in this endeavor.

Mr. **Clinger**. Thank you very much, Mr. Chairman. I think I should quit while I am ahead here.

It is unfortunate, I think, that in the evolution of the aviation industry, security of passengers and aircraft from deliberate acts of violence is now a paramount concern of Government and carriers alike. Equally unsettling is the apparent ease with which a determined individual—terrorist—can circumvent our present array of metal detection and x-ray devices, as the Pan Am 103 disaster so cruelly demonstrated.

Out of necessity, governments, carriers, and airport operators have assumed the responsibility of assuring the safety of passengers. Sadly, though, the increasing sophistication of terrorists has outstripped our ability to stop their campaign of random destruction.

We must not allow them to gain the upper hand. We cannot afford to wait for the development of an absolutely fail-safe detection system. Too many lives are at stake.

Thermal neutron analysis, TNA, enhanced X-ray, and vapor detection devices, will give us an arsenal with which to counter the efforts of those who wish to do us harm.

TNA, in particular, shows great promise in the detection of plastic explosives, but at $1 million a copy, and a very long lead-time to construct these devices, it is going to require that we wait a considerable period of time before they make a real improvement to aviation safety.

Mr. Chairman, I look forward to today's hearing, and I am especially interested to hear from our witnesses. Your legislation is, I believe, a necessary and reasonable response to the increasing threat posed by terrorists throughout the world. I am very hopeful that we—and by that I mean the Federal Government, carriers, and airport operators—can reach agreement on the financing and operational questions in a rapid fashion, and get these sophisticated devices into our airports as soon as possible.

Thank you, Mr. Chairman.

Mr. **Oberstar**. Thank you very much. I share that hope, and we will move this hearing along expeditiously toward that purpose. The gentleman from Louisiana.

Mr. **Hayes**. Mr. Chairman, I think the issue that we are addressing here will be a continuing theme in this session of Congress. We are going to decide in this legislation, as well as other subsequent pieces of legislation, the purpose of the trust fund. We are going to decide whether the trust fund is a budget item by which—to use to offset bottom-line expenditures that exceed Gramm-Rudman targets, or are we going to decide whether the trust fund is indeed intended to be a tool by which we improve airports, air carrier service, and benefit the public as a whole?

If the latter view is taken, then the question does not become whether or not we should spend money that people pay in order to have services provided, but a matter of using the regulatory agencies as a conduit to determine how far each dollar can be stretched to the best and total benefit of those who are consumers of air service.

I think it is time to start looking at the initial purpose of the trust fund, instead of diverting to the attention that what we cannot afford, because of increased budgets, as opposed to what we save the money for. If the terror of flying is not a motivation to use funds in a trust fund, I cannot imagine whatever will be, and perhaps we should re-think whether or not we even have one. Thank you.

Mr. **Oberstar**. I thank the gentleman for those remarks. The gentleman from Iowa.

Mr. **Lightfoot**. Mr. Chairman, I have a statement, but in the interests of time, I would ask unanimous consent to enter it in the record.

Mr. **Oberstar**. Without objection, the gentleman's statement will be included in the record.

[Mr. Lightfoot's prepared statement follows:]

### STATEMENT OF JIM LIGHTFOOT, MEMBER OF CONGRESS

Mr. Chairman, members of committee, I am pleased to see we are meeting today to consider the problem of airport and airline security. Terrorism and security threats have become a growing international problem. As financial conditions in the marketplace have made competition more fierce, airlines have been confronted with increased threat to the security of their passengers, their employees, and their equipment.

I agree we should investigate and review available options for us to improve security conditions in today's marketplace. Therefore, I commend our chairman for his efforts in this regard.

However, I am hopeful we will not act rashly or unwisely in merely placing further burdens on an already-burdened air transport industry or a highly-leveraged, debt-ridden Federal Government. I look forward to the comments of my colleagues and a healthy discussion of the sensitive issues before us today. Thank you, Mr. Chairman.

Mr. OBERSTAR. The gentleman from Texas. Mr. Laughlin.

Mr. LAUGHLIN. Mr. Chairman, since we started these hearings on aviation security, I have been overseas on American Airlines and Pan Am Airlines. On those occasions, I had access to the cockpit and the crews on both those airliners.

Mr. HAYES. They were terrified.

Mr. LAUGHLIN. They were terrified. Thank you, Mr. Hayes. And they urged me to relay to this committee, and to you, which I have already done, and I would relay to the witnesses here—these men and women are putting their lives on the line each day when they take these airliners into the sky with many American lives at their hands, and they have urged us to get a solution to this terroristic problem, and I am here to assure you and the witnesses, I look forward to working with you to bring a solution and attack this terroristic problem. Thank you, Mr. Chairman.

Mr. OBERSTAR. I appreciate your participation and your help. The gentleman from Missouri?

Mr. HANCOCK. No statement, Mr. Chairman.

Mr. OBERSTAR. No statement. Are there other members who wish to make opening comments? Mr. Bosco?

Mr. BOSCO. No, thank you, Mr. Chairman.

Mr. OBERSTAR. The gentleman from North Carolina.

Mr. VALENTINE. I have just a short statement which I will try to make shorter, Mr. Chairman. Today's hearing on H.R. 1659 is of special interest to me because, as Chairman of the Transportation, Aviation and Materials Subcommittee of the Committee on Science, Space, and Technology, I chaired a hearing on aviation security several weeks ago.

At that time I stated—and it is worth repeating here—that the Congress must find a way to give the American people a sense of confidence that action is being taken to protect the flying public and that we, in the Congress, are moving to make airports and airplanes less vulnerable to terrorist attacks.

I congratulate the Chairman for the introduction of this legislation and believe that it moves in that direction, and ask unanimous consent to insert in the record the balance of my statement.

Mr. OBERSTAR. Without objection, so ordered. The gentleman's statement will be included in full.

[Mr. Valentine's prepared statement follows:]

### STATEMENT OF TIM VALENTINE, MEMBER OF CONGRESS

Today's hearing on H.R. 1659 is of special interest to me because, as Chairman of the Transportation, Aviation and Materials Subcommittee of the Committee on Science, Space, and Technology, I chaired a hearing on aviation security in February.

At that time I stated, and it is worth repeating, that Congress must give the American people a sense of confidence that action is being taken to protect the flying public and that we are moving to make airports and airplanes less vulnerable to terrorist groups.

The Federal Aviation Administration is the lead federal agency for aviation security. It has invested millions of dollars in developing airport screening devices to find deadly explosives and weapons in luggage and on passengers. The Aviation Security Act of 1989 will require all U.S. air carriers to install and use explosive detection equipment.

As the tragedy of Pan Am flight 103 teaches, international terrorists are becoming increasingly sophisticated in terms of their tactics and capabilities. It would be naive for us to assume that technology can provide all the solutions. However, we in Congress must insist on action from the FAA and others so that airports become off limits to individuals carrying even the most sophisticated devices.

Mr. **Oberstar**. The gentleman from Georgia. Mr. Jones.

Mr. **Jones**. Thank you, Mr. Chairman. I just want to compliment you on the hard work and the thorough preparation that you and your staff have put into this most important piece of legislation.

Airline security and safety is something that affects us all and affects all of our families, and I think we must act quickly and affirmatively to protect air passengers from terrorists, and I think that this bill addresses these concerns.

And I know that the aviation community in Atlanta looks to this committee for support, and for action, and I applaud you for your leadership in introducing H.R. 1659. Thank you.

Mr. **Oberstar**. I thank the gentleman for those remarks. The gentleman from Colorado. Mr. Skaggs.

Mr. **Skaggs**. No statement, Mr. Chairman.

Mr. Oberstar. I would like to place in the Record at this point a statement received from our colleague, Representative Jerry Costello.

[Mr. Costello's statement follows:]

## STATEMENT OF JERRY F. COSTELLO, MEMBER OF CONGRESS

Mr. Chairman, it is a pleasure for me to see this bill come to our committee after previous hearings on the issue of aviation safety. Recent incidents involving Pan Am flight 103 and other airline security violations have brought this important issue to our attention, and it encourages me to see this legislative action take place in an effort to prevent further tragedy.

I am also encouraged by Transportation Secretary Skinner's promise to visit Europe and discuss the implementation of security devices, as well as heightened airport security measures, with European leaders. In addition, actions by the FAA to improve security will greatly add to these efforts.

In this bill, we will be requiring the installation and use of explosive detection equipment not less than 60 days after the date of enactment. In addition, we will be making available significant funding from the Aviation Trust Fund for the FAA Administrator to obligate for the acquisition of explosive detection equipment.

I look forward to the comments of the witnesses today, and hope this subcommittee can move forward to advance this bill, which I feel is quite necessary to improve international airline safety standards.

Mr. **Oberstar**. Thank you. Our first witnesses are Mr. Robert Knisely, Deputy Assistant Secretary for Budget and Programs from the U.S. Department of Transportation, accompanied by Darlene Freeman, Deputy Director, Office of Civil Aviation Security for the FAA.

Welcome to our hearing. We appreciate your participation and your representing the Secretary on this important occasion.

I just want to ask my colleagues to keep in mind specific questions that they may have, and those that may have been raised—if you have had the opportunity to read testimony of other witnesses—with a specific goal in mind, and that is, tomorrow, this subcommittee will convene to mark up H.R. 1659, and if there are issues that you have concerns about, I want you to raise them now, get them on the record, explore those matters, so that tomorrow we can move speedily toward conclusion of this legislation, and report it to the full committee, which will meet on Thursday to complete the markup on this bill.

I think it is also important to mention that the Appropriations Committee has jumped the gun on some of these issues and included language in the supplemental appropriation bill dealing with security matters, that are the subject in fact of today's hearing and they did it knowing that they were legislating in an appropriations bill.

## TESTIMONY OF ROBERT KNISELY, DEPUTY ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS, U.S. DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY DARLENE M. FREEMAN, DEPUTY DIRECTOR, OFFICE OF CIVIL AVIATION SECURITY, FEDERAL AVIATION ADMINISTRATION

Mr. KNISELY. Thank you, Mr. Chairman. Mr. Chairman, and members of the subcommittee, I welcome the opportunity to appear before the subcommittee today to discuss the Department of Transportation's views concerning H.R. 1659. With me today is Ms. Darlene Freeman, Deputy Director of the FAA's Office of Civil Aviation Security.

As you know, Secretary Skinner is in Europe this week to maintain the momentum of February's ICAO's aviation conference in Montreal, and build a unified approach to improved aviation security.

He announced his specific agenda for security initiatives April 3rd, following his and the President's meetings with Pan Am 103 families.

He is meeting this week with officials in Italy, West Germany, Switzerland, the United Kingdom and France, and one subject will be the placement of explosives detection technology abroad.

Use of the TNA devices overseas requires diplomatic and technical coordination, and he hopes to facilitate this process. We must be ready to place the equipment where it is most needed, as soon as it is manufactured.

Before outlining the Department's views concerning H.R. 1659, I would first like to describe briefly for you several major security initiatives which Secretary Skinner has announced since his March 23rd appearance before this subcommittee.

As you said, Mr. Chairman, Secretary Skinner needed no prodding. These initiatives include requiring deployment of explosives detection systems such as the Thermal Neutron Analysis device at the busiest airports in the U.S. and overseas where U.S. airlines operate. The U.S. will immediately initiate negotiations with foreign governments regarding installation of these systems at foreign airports, consistent with the Secretary's European initiative;

Assigning additional FAA security specialists to provide greater surveillance and assistance to U.S. carriers operating at the busiest airports in the U.S. and overseas;

Improving the FAA security bulletin process through which important security information is disseminated to the aviation community, in a variety of ways, including: making compliance by U.S. air carriers with such directives mandatory; requiring acknowledged receipt within 24 hours; requiring carriers to submit to FAA within 72 hours specific information on how they plan to carry out preventative measures; and ensuring that specific information in security bulletins is distributed to pilots-in-command of airline flights;

Elevating standards for x-ray and metal detection equipment to assure that U.S. air carriers are using state-of-the-art equipment; forming a National Aviation Security Advisory Committee to provide a forum for the exchange and coordination of security programs and research and development designed to further enhance aviation security; and conducting a top-to-bottom review and evaluation by FAA of how well U.S. air carriers are complying with security requirements.

This effort will look at each airline's resources and general philosophy toward security.

Discussing with foreign governments new procedures for more effective coordination of the international assessment and dissemination of security information and countermeasures is also included.

All of these measures are being addressed with a high sense of priority. The fight against terrorism is one of Secretary Skinner's highest priorities.

I would like to turn, now, to a brief discussion of H.R. 1659 which is pending before the subcommittee. H.R. 1659 would require the FAA Administrator, within 60 days after the bill's enactment, to mandate the installation and use by air carriers, at selected airports, domestically and overseas, of explosives detection equipment equivalent to or better than TNA technology.

The bill would also establish a grant program through which air carriers could receive up to $100 million in reimbursement for the purchase and installation of required explosives detection equipment. The $100 million would be available commencing with $50 million in grant authority in fiscal year 1989.

The legislation would also make available an additional $170 million in grant authority—$85 million in fiscal year 1989—under the Airport Improvement Act for airports to purchase and install equipment needed to comply with FAA regulatory requirements regarding controlled access to secured areas of airports.

Although we recognize and fully appreciate your intent in proposing H.R. 1659, we do not support its enactment. The Secretary has already announced that the FAA will act to require explosives detection equipment such as the TNA at appropriate airports here and overseas.

The FAA already possesses ample authority to issue such a requirement, and, as previously noted, this matter is a high priority with us. We have already begun efforts to define the nature of the equipment to be required, along with a timetable and priority schedule. Legislation is not needed to facilitate our efforts in this area.

We would ask only for the subcommittee's continued support as we move forward to achieve the benefits of the state-of-the-art explosives detection technology on which we have worked for so long.

We also do not believe that there is a need for Federal funding of explosives detection equipment as contemplated by the bill's proposed $100 million grant program.

The Secretary has considered various funding options for TNA-type equipment and concluded that there is not sufficient reason to alter the existing framework under which air carriers are responsible for meeting FAA-imposed security requirements.

In fact this framework is no different than that which exists for any other FAA regulatory requirements, such as the TCAS collision avoidance systems, even if costs to the regulated party may be associated with their installation.

We agree that there is a need for a strong Federal presence in the security area, and the Federal Government has played a significant role. Between fiscal year 1980 and 1989, for example, FAA has invested about $45 million for the development of TNA and vapor detection technology alone.

Additionally, we are increasing our security staff by 56 inspectors this year, and we are seeking in our fiscal year 1990 budget an additional 120 security inspectors who will work closely with airports and airlines, here and abroad, to improve security.

Our presence overseas will be strengthened as a part of this increased staffing effort. These are legitimate facets of an appropriate Federal role, and we intend to continue to play a strong, active role in combatting the threat of terrorism.

We also do not support the bill's increased grant authority of $170 million to be made available to airport operators for purchasing and installing equipment to carry out FAA requirements related to access to secured areas.

Airport operators may already use their entitlement grant funds under existing Airport Improvement Program grant authority to defray from 75 to 90 percent of the costs of required security equipment, if they choose.

It is an airport operator's choice as to how to spend entitlement funds among various eligible projects. We do not favor provisions that would fund 100 percent of any eligible program, or increasing the overall grant program to assist airports in complying with FAA's recent rulemaking on secured access.

In closing, Mr. Chairman, I would like to stress that we appreciate the subcommittee's interest in working to help improve the security of our air transportation system. We look forward to working closely with you and members of this subcommittee to strengthen our Nation's ability to respond to terrorist threats.

That completes my prepared statement, Mr. Chairman. We would be pleased to respond to questions you may have at this time.

Mr. **Oberstar**. Thank you very much. We want to reiterate the real appreciation on our part, on both sides of the aisle, for the splendid cooperation we have had with the Department all through this very, very important matter, and other issues involving aviation.

Mr. **Knisely**. Thank you, sir.

Mr. **Oberstar**. I would like to ask both you, Mr. Knisely, and Ms. Freeman, to remain available through the balance of the hearing, unless you have some really overwhelming, pressing, other demands, because there may be some questions raised by other witnesses—in fact I think there will be questions and issues raised by other witnesses to which you may wish to respond, and to which we might like to have you respond later on.

Mr. **Knisely**. Of course, Mr. Chairman.

Mr. **Oberstar**. Fine.

The first question is, who is the object of the terrorist attack, or, what is the object of the terrorist attack?

Mr. **Knisely**. I think the object of the terrorist attack is the U.S. presence, or the U.S. flag, or simply that plane. There have been, as you noted earlier, Mr. Chairman, terrorist attacks on other airlines around the world, as reflected by the conviction reported this morning in the Korean incident.

Mr. **Oberstar**. Certainly in the Pan Am 103 tragedy, there were citizens from 20 other countries destroyed in that bombing, weren't there?

Mr. **Knisely**. Yes, sir.

Mr. **Oberstar**. The attack of the terrorist certainly was not on Pan Am Airlines, was it?

Mr. **Knisely**. No. I think the threat was addressed to all passengers that fly internationally.

Mr. **Oberstar**. And although we do not know, publicly, I think the State Department and our intelligence agencies are doing a splendid job in piecing together causes—that is, the terrorist motivation side, or the physical cause, and I think that is a different matter—but the terrorist motivation for that attack I think is—without getting specific and going into areas that are sensitive, or classified—I think it is fair to say that this, and other random terrorist attacks have, as their objective, changing U.S. policy, changing U.S. actions abroad, retaliation against the United States as a Government, and as a people.

Wouldn't you say that is a fair statement?

Mr. **Knisely**. I think that might be true, Mr. Chairman, but American passengers fly on other airlines as well, so I do not think the attacks would necessarily be limited to American air carriers.

Mr. **Oberstar**. And American air carriers just happen to be probably the most visible presence of the United States abroad, and a convenient target for very cowardly attacks. These terrorists are by no means brave people.

Mr. **Knisely**. I think we have seen some evolution of activities against air carriers, starting with hijacking. Presently it is terrorist attacks on American carriers. Perhaps it will be on other carriers soon.

Mr. **Oberstar**. That may well be. As threats against oil tankers were issued in the Persian Gulf during the Iran/Iraq war, protective measures by the United States and other West European governments were taken. The French were threatened, and the Italians were threatened at a time.

It is clear that the focus of the terrorist attacks against U.S. airlines, is against U.S. policy, against the U.S. Government, against the United States' presence, and for a variety of other reasons.

This is a foreign policy issue. It is clearly not like other responsibilities the airlines have to maintain aircraft in top-flight working condition. This is not like a minimum equipment list issue.

And therefore, I think it is not quite right to say that the framework proposed by the Department, to fund the TNA and other security measures—as you say on page four. Quote.

"This framework is no different than that which exists for other FAA regulatory requirements such as TCAS." TCAS clearly is a carrier responsibility, and Mode C, clearly, a general aviation responsibility. If they are going to fly in those congested areas, they have got to have this equipment.

But there is a different dimension in the matter of terrorism, and I think therefore, a different response in providing the necessary equipment to defend against these random attacks is necessary, and that is why I think the funding ought to be provided out of the aviation trust fund or through the tax structure, rather than through outlays on the part of the carriers.

Mr. **Knisely**. Mr. Chairman, I think that the attacks may encompass both American carriers and foreign carriers, and could be directed at passengers of other nations. I think the risk could be equally seen as one which needs to be addressed by the passengers. While I do not believe the carriers should assume the burden for this, there is the security surcharge. We would expect that those charges—if they were imposed by the carriers—would be passed through to the passengers who are assuming the risk.

Mr. **Oberstar**. Yes. We already have a mechanism for providing facilities and equipment. The Aviation Trust Fund. I think it is in place, it is available, the funding is available, and while there are some budgetary questions about how you deal with it, those are technical matters that I think can be dealt with. I would like to move on to another issue, and that is the cost of putting in the access doors, and you have a different view on how it should be funded.

Let's leave the how it should be funded issue aside, since we will agree to disagree for the moment on that matter.

Mr. **Knisely**. Yes, sir.

Mr. **Oberstar**. And try to get an understanding of the costs. In the FAA assessment of the number of security doors—which was presented in earlier testimony—the number was considerably lower than the number of doors requiring security controls as submitted in testimony by airport operators.

What was the basis for the FAA-DOT estimates? Where did the FAA get those numbers from, and why is there such a wide discrepancy between the number of doors in the FAA estimate, and that of the operators of the airports?

Mr. **Knisely**. Ms. Freeman has volunteered to answer that question, sir.

Mr. **Oberstar**. Very good.

Ms. **Freeman**. Thank you, Mr. Chairman. Mr. Chairman, the estimates of the FAA in putting out the automated access rule were based on a survey of some 50 airport layout plans, and the concept that the FAA was employing, of a funneling-through concept, which would not require direct access controls of every single door at an airport, but, rather, would provide for direct access control of a primary access point, and any subsequent doors beyond that would be considered to be indirectly controlled.

Therefore, the FAA's estimate of the number of doors that would require direct access control, under the rule, was lower than the understanding of the airport operators.

Mr. **Oberstar**. Well, have you tried to reconcile those differences in the weeks since our previous hearing?

Ms. **Freeman**. Since the Notice of Proposed Rulemaking was issued, and the comments were received from the airport operators as to the discrepancy in the number of doors, we did a sampling of airports at five of our regions, to verify that, indeed, the estimates that we had proposed originally were accurate. This was found to be the case.

Mr. **Oberstar**. Well, there are some very considerable differences. I am just wondering: has the FAA taken a look at access doors at any particular airport and given some thought to whether some of those doors are unnecessary? Some of those openings into airport operations areas might usefully be closed off and avoid that rather substantial cost.

Ms. **Freeman**. We would agree with that, Mr. Chairman. In fact we have encouraged the airport operators to take a look at all of their doors, and those that are considered unnecessary should be sealed so that fewer doors have to be actually controlled.

I might also add that we have been attending meetings of the Airport Operators Council International, as well as some of the other airport associations, and worked with them to share this concept of funneling—this funnelling-through concept—and we believe that we have reached a better understanding with the airport operators as to how this rule would be implemented.

Mr. **Oberstar**. Well, that is good. I would appreciate any further information that you may wish to submit for the record, but you would have to do it today in order for our consideration before the markup tomorrow.

A final question, although I have a number of others that I will get back to later. I want my colleagues to have an opportunity to raise their concerns. And that is the concern of domestic carriers—that foreign air carriers are not being made to comply with the same tough standards set down for U.S. carriers.

There was testimony given by the Secretary, earlier, and by the State Department, that there are some diplomatic problems and questions of negotiating, and the sensitivity of foreign carriers and governments, particularly, to making their carriers comply with U.S. rules.

I am sure this is going to be a subject of the Secretary's actions today, and in the days to come in his meetings in Europe. But what further thought have you given, since our last hearing, to leveling the playing field, evening the costs, and not having two differing structures of security?

Mr. **Knisely**. Mr. Chairman, I do hope that the Secretary is addressing that issue; I know he went abroad with a number of issues. Using your figures—40 million takeoffs and landings this year, and a proposed expenditure of $50 million for the TNA devices—the playing field is fairly level. That additional charge per passenger would only be $1.25, which is less than the price of one drink on board.

You could either have the drink and feel safe, or you could pay the $1.25 and be safe.

Mr. **Oberstar**. Yes, but we want to make sure that the foreign carriers are doing as much to make folks be safe, and feel safe as U.S. carriers are going to be doing.

Ms. **Freeman**. Let me expand on that.

Mr. **Oberstar**. Yes.

Ms. **Freeman**. Mr. Chairman, as you know, the Secretary has expressed his feelings that his preferred way of dealing with this issue is through the ICAO organization, in order to ensure international standards that the entire world can enjoy, and, as a result of this, a special session was held at the ICAO Council in February, where he urged other nations to adopt the same types of standards that the U.S. has adopted.

We are expecting to have a panel of the ICAO—the Aviation Security Panel will be meeting in May to address some of the issues that the council resolution adopted in February. So we are hopeful that we can move on this issue through ICAO.

Mr. **Oberstar**. Now Congressman Hammerschmidt has raised that. I think he will want to pursue the matter further, so I will not pursue that matter at this time, except to say I think that ICAO is a good vehicle through which to pursue equity and comparability, and security measures among all carriers.

But there is the question of—you know—of tightening and toughening the FAA inspection standards, that they ought to do more inspections and assessments. I guess "assessment" is the proper word under our legislation. More unannounced inspections and assessments of foreign operations—airports and their security areas.

And that results of those assessments ought to be made available to U.S. carriers, and ultimately to the public. What is your reaction?

Ms. **Freeman**. We have a very aggressive foreign airport assessment program now, as you know, and we expect that in fiscal year 1990 we will have a 28 percent increase in the number of foreign airport assessments, for a total of approximately 530 foreign airport assessments. I would like to submit something for the record, if we can, later on, on the specific proposal that you just mentioned.

Mr. **Oberstar**. And what about airlines? I mean, inspection of airlines, airline companies, and how they are providing, and doing security?

Ms. **Freeman**. Recently, we adopted a rule under part 129, which will require the foreign air carriers to submit security programs to the FAA for our approval. We can expect that as this rule is implemented, and we receive security programs, and review and modify them, as necessary, that we will be accomplishing a lot towards the goals that we are speaking of.

Mr. **Oberstar**. Well, the FAA has done a fine job. I have no quarrel with their side of it. What I am concerned with is that in information provided our committee and the Foreign Affairs Committee, it is clear that many of the foreign governments listen to the assessments by our personnel and shrug them off, particularly on the issue of perimeter security.

Ms. **Freeman**. Under our foreign airport assessment program, if the foreign airports do not meet international standards we have mechanisms, through the existing legislation, to take action, including issuing a 90-day notice to the foreign airports. So we feel that the current legislation does address that issue.

Mr. **Oberstar**. Now that is an area that I think may require some stiffening. If foreign carriers and foreign airports, and foreign governments do not want to do security up to the standards that we think are necessary to protect American citizens, maybe they would like to forego about the $30 billion Americans are spending overseas in tourism dollars, and see how they like to live without it.

The gentleman from Arkansas.

Mr. **Hammerschmidt**. Thank you, Mr. Chairman. Ms. Freeman, let me address this question to you. In the earlier discussion with the Chairman, you were talking about master direct access doors and the burden that that might create in the operation of an airport. The airports have suggested a pilot program of 10 airports, but you testified that you have already studied 50 airports in arriving at your decision.

Under the FAA's new access rule, the airports are concerned that they will be held responsible for security violations by their tenants. How would this work with respect to airport tenants that have exclusive use over their own areas, such as fixed-based operators, or the National Guard, for instance?

Ms. **Freeman**. I would like to address the first point. On the pilot program, I would like to note that we have had a number of airports that have had automated access systems in place. In fact four airports have had them in place for a number of years, and some 11 airports are in the process of installing such systems. So we do not view the pilot program as being a necessary factor at this time.

With respect to your question about the tenants, and how we intend to enforce the rule against airport operators, it is our view—consistent with our traditional regulatory philosophy—it is our view that the airport operator is responsible for security at the airport, and that therefore, we would expect the airport operator to enter into whatever agreements he sees necessary with the tenants, through their contractual arrangements, in order to ensure that the rule is complied with.

However, the primary regulated party is the airport operator, and consistent with our regulatory philosophy, that would be the party that we would be dealing with.

Mr. **Hammerschmidt**. So you feel that the National Guard, as a military installation—which the airport operator might not have direct access to, should retain liability for anything that happens through that particular operation?

Ms. **Freeman**. Through the arrangements that the airport operator reaches with these tenants, we feel that that would be the preferred mechanism, sir.

Mr. **Hammerschmidt**. The FAA's approach to security screening seems to be to step up inspections, levy stiff penalties if test weapons are not detected, rather than to set higher personnel or training standards.

Has any thought been given to improving FAA rules governing standards for personnel, training, and compensation to airline security screeners?

Ms. FREEMAN. This is an area that we have been studying for a number of years, and in fact we support the efforts that are underway to improve the efficiency of screening personnel.

The Air Transport Association has developed and is planning to test a model program to address some of these elements, including qualification standards and management oversight, and we strongly support the ATA's program in this regard.

In addition, the FAA has a study under way now at Baltimore-Washington International Airport through our research and development efforts to take a look at the systems integration concept at an airport, including the screening systems, to include staffing standards and the design of the checkpoint as well as the screening personnel.

We are hopeful that once we get the results of this study, that we would then be in a position to move ahead and take whatever action we would need to take in this area.

But we feel that at this point it would be premature to move ahead with rulemaking until we get those studies done.

Mr. HAMMERSCHMIDT. Well, I hate to pick out one airline, but I will. United Airlines has a program for security screeners in which it provides better supervision at security checkpoints, better security equipment, technology, and monetary incentives for screeners to find guns and explosives.

Are you looking at those type procedures to try to come up with a improved screening rules?

Ms. FREEMAN. Yes. We are.

Mr. HAMMERSCHMIDT. And Secretary Skinner's trip overseas—Europe—do you know whether he is looking at how international security through the different airlines would be funded? Are they thinking in terms of any pool funding? Are they thinking that each airline should pay for security individually? Do you know what they are discussing?

Ms. FREEMAN. Let me make sure I understand your question. Are you talking about requirements on U.S. carriers abroad?

Mr. HAMMERSCHMIDT. No. I am thinking about an agreement on for all carriers, international carriers.

Mr. KNISELY. I have no information on that, sir.

Mr. HAMMERSCHMIDT. That is something that we will be discussing that with the Chairman and others on the committee.

Mr. KNISELY. Yes, sir.

Mr. HAMMERSCHMIDT. One other question. Are passengers of commuter airlines required to go through the same security screening as passengers of larger airlines? If not, should they be required to do so?

Ms. FREEMAN. We have a regulatory scheme which varies, depending on the size of the airline. The passengers on aircraft with 60 seats or more are required to go through screening. We have a different security program for commuter airlines with from 30 to 60 seats, and a different scheme for passengers on airlines with less than 30 seats.

What we now do—to answer your question directly—screening is not required for passengers on the 30-to-60-seat aircraft. However, we do have in place mechanisms to separate those passengers once they arrive at an airport, where there are sterile zones that are occupied by passengers who have undergone screening.

We have mechanisms in place to separate passengers from the commuter aircraft and have them escorted to the terminal areas.

Mr. **Hammerschmidt**. Thank you very much.

Mr. **Oberstar**. The gentleman from the Virgin Islands. Mr. de Lugo.

Mr. **de Lugo**. Thank you very much, Mr. Chairman. I want to apologize to the committee for being late this morning. I had to appear before the Appropriations Committee in my role as Chairman of the Insular and International Affairs Subcommittee and I do not want to ask any questions at this time.

I want to, rather, pass right along to those who were here to hear the witnesses, but I would ask unanimous consent to insert at this point a prepared statement.

Mr. **Oberstar**. The gentleman's statement will be included in the record at this point. Without objection, so ordered.

Mr. **de Lugo**. Thank you, Mr. Chairman. I yield back my time.

[Mr. de Lugo's prepared statement follows:]

### Statement of Ron de Lugo, Member of Congress

Good morning. I want to thank the chairman of this subcommittee, Mr. Oberstar, for holding this hearing today.

I commend the chairman for moving so quickly with this very important bill. I support H.R. 1659 and hope that this bill will move expeditiously through the House and Senate and be signed by the President.

Mr. Chairman, the initial hearing on aviation security that the subcommittee held last month was very informative, and yet very frightening. Informative, because the hearing showed the type of detailed procedures and steps that are now being taken by airlines and airports around the world to prevent airline terrorism. Frightening, because the type of explosives that are now being used by terrorists are so sophisticated that only the most modern detection equipment available can identify them. One undetected explosive device can cause hundreds of deaths as shown by the Pan Am tragedy.

Mr. Chairman, if we are to stay ahead of the aviation terrorists, it is critical that we pass H.R. 1659. H.R. 1659 would authorize $100,000,000 for the Administrator of the FAA to make grants to pay the costs of air carriers that acquire explosive detection equipment. Up to $50,000,000 may be obligated in fiscal year 1989 and the remainder of the funds may be obligated in future fiscal years. The bill also allows grants to be made to airports to pay the cost of acquiring and installing equipment used to control access to secured areas of the airports.

This bill will help restore confidence to the traveling public that must travel in high-risk areas of the world or to areas that have been identified as potential terrorist target areas. Passenger safety must remain the top priority and this bill ensures that the modern equipment is being used to prevent one undetected device from slipping through.

I look forward to the testimony from today's witnesses on this very important subject, and again Mr. Chairman, I commend you for holding this timely hearing.

Mr. **Oberstar**. The gentleman from Oregon. Mr. DeFazio.

Mr. **DeFazio**. Thank you, Mr. Chairman. I guess I have a series of questions here that I would like to engage the two witnesses on. I am always afraid that in reaction to disastrous public events, that we often hasten to solutions that in the short-term seem optimal, but, in the long-term are not necessarily the best, and if we wait another two or three, or six, or nine, or 12 months, sometimes we can get a good long-term solution.

It is a part of my concern with the rush to install the current technology, and I guess I want to be assured that it is the best technology out there.

Now I know that vendors always have competing interests, but I do have materials from a vendor who is using a different kind of technology rather than the thermal neutron analysis which is a very sensitive vapor detection, and apparently the FAA is currently engaged in testing this technology, and the initial tests, under more realistic conditions than were used—to my understanding—for the TNA, have been successful.

I guess what I would like to suggest is that what we might want to see is the agency working with other agencies who have an interest.

For instance, the FBI, Department of State, and I would say the Department of Defense and the Department of Energy—all—are looking at screening devices of one sort or another for their various uses—entry into nuclear plants, entry into sensitive military areas, entry into U.S. embassies overseas.

Now, granted, most of these things again are keyed to individual passengers, but I do not want to lose sight of that either.

Now we are focused, suddenly, on checked baggage. At the same time we seem to have forgotten about the passenger screening and the improvements needed in the passenger screening.

So, now let's get to a question after that bit of a monologue. Are you convinced that the TNA is the best available technology in the short- and long-term, and this is indeed the solution for checked baggage?

You know, what efforts are you undertaking to accelerate the evaluation of alternate technology? What joint efforts have you undertaken with other agencies of the Federal Government that are looking at this technology?

Ms. **Freeman**. Let me answer that. Given the current state of the art in this area, we feel that TNA is the best available method for the screening of checked baggage.

However, what we propose to do, in order not to exclude other technologies that might come on line, is to require explosive detection systems that meet, at a minimum, the standards that TNA meets, so that we can be open to newer technologies as they come on line.

We are also aggressively pursuing research and development efforts in other areas, in other technologies, including the vapor detection systems such as you mentioned. We have tested one of those systems in cooperation with the Department of State at the FAA's Tech Center, and we will be conducting a test of another of those systems at the Tech Center, I believe later this month, or next month.

So we are aggressively pursuing those other technologies, but we feel at this time that further refinements need to be made in the areas of sensitivity as well as throughput, in those areas, before we are ready to move ahead as we have with the other.

Mr. **Knisely**. You are correct, Mr. Congressman. The TNA technology is being advanced about a year ahead of when it would have been introduced.

Mr. **DeFazio**. Yes. That is a concern I have here. I understand that when the TNA was tested at San Francisco and Los Angeles, that the bag test was actually conducted with simulated explosives, and that these simulated explosives were not hidden in the baggage.

This reminds me of the test that we had, until recently, for checked baggage, which is a fully assembled handgun encased in plastic, placed in a carry-on bag with no more than two articles of clothing.

Of course terrorists comply with those packing rules. They do not break down the handguns, they encase them in plastic, and they do not pack the bag full of other things.

I am concerned that this simulated test was not realistic either. Not too many terrorists are going to tape something to the outside of the bag. Could you address that.

Ms. **Freeman**. Yes. I will address that. I am told that we used both simulants and actual explosives in the laboratory tests, and that in addition to that, the way that the TNA system operates, it does not distinguish between an explosive that is inside the bag or outside the bag. It is an automatic detection that is not dependent on the explosive being inside or outside the bag.

Mr. **DeFazio**. But I mean the question is: Have you used comparable tests for these two technologies, the vapor detection and the TNA? Have you used the most sophisticated, lowest—I am not a physicist, I cannot remember what it is, but the vapor escapes at a certain rate in certain kinds of plastique, and some of them you can, you know, you can easily detect by odor, and some you cannot.

So have you used the most inert, most advanced plastique, concealed in identical ways, and tested, one system against the other, to see whether or not they are comparable?

Ms. **Freeman**. I think that to answer your question would require probably a detailed briefing of exactly how TNA works versus the vapor detection equipment and we would be happy to—

Mr. **DeFazio**. I have had some briefings, and I guess I am just concerned that in order—you know—there was a great tragedy here, and we do not want the tragedy repeated. The question is, are we going to repeat the tragedy over the next 10 years if we require the installation of one kind of technology that is quickly superceded by another that is out there, or even one we cannot imagine?, and then we do not require the airlines, because they have made this investment, to go back.

This is something I have heard from the airlines over the years as I have been in foreign airports. When I go to a foreign airport, I notice they have color monitors; they have computer-assisted detection for checking on the bags. They go over you with the portable scanners and all those things.

Why don't we do that here? They said, well, if we put in color monitors here it is very expensive. If we change; it is very expensive, and then what if the FAA comes up with another standard next month? So if we develop a standard now, we require them to expend tremendous amounts of money, my concern is we will be reluctant—I will not, but I know the agency will—to go back in 2 years and say we were wrong, there is much better equipment available out there.

It is now going to cost you another $100 million, and we want you to install this new equipment. Tell me there will not be a lot of resistance up through the agency from the industry to that sort of a request. You know. I mean, that is my concern here. I mean, in a rush to correct a very serious deficiency, that we may not be introducing the best possible solution.

Mr. **Oberstar**. The gentleman's time has expired. You may respond to the question.

Ms. **Freeman**. Well, we do share that concern with the continuing evolution of technology, and we would hope that that would not stop us from looking for better technologies. What we hope to put in place is a performance-based requirement that we hope can be upgraded as new technologies come into place, and we will continue our R&D efforts to find better technologies, should they come up.

Mr. **DeFazio**. Thank you.

Mr. **Oberstar**. The gentleman from California. Mr. Packard.

Mr. **Packard**. Thank you very much. I, too, apologize for not being able to hear your testimony in person, but I did read most of it. What is your opinion as to the use of trust funds, if at all, in the installation and development of this?

Mr. **Knisely**. Sir, the trust funds have been collected for other purposes, across domestic as well as international flights. We have here an expenditure reasonably related to a class of passengers, those passengers in international travel. If I were traveling, say, between Hibbing, Minnesota and International Falls, don't ask me to pay for an explosives detector in Heathrow Airport.

What we are talking about here is an expenditure on the part of the passengers, of $1.25 per passenger, and it does not seem that using the trust funds is necessary.

Mr. **Packard**. Do we not require other security measures at your commuter airports, and all of our airports?

Mr. **Knisely**. We have conceded this is a difficult issue, sir, but I would say that although security measures are fundable, you can identify a specific class of users and a specific need, and that it can be funded directly.

Mr. **Packard**. Do you think that we ought to impose the same requirements on foreign airlines?

Mr. **Knisely**. Well, we are hoping the Secretary is working through ICAO on that possibility. That does raise issues of the independent nations and the State Department——

Mr. **Packard**. Well, that was my next question then. How would we monitor it and enforce it, and what effect would that have upon other nations?

Mr. **Knisely**. Well, I think that that does present all those difficulties. Yes, sir.

Mr. **Packard**. In your judgment, is is possible for TNA to meet the schedule in terms of production, and in terms of the airports, in terms of implementing under the——

Ms. **Freeman**. What we would propose to do is to have a phased-in requirement for the installation of these systems in order to match their availability. We understand, from the company that has developed TNA, that they would be able to produce 50 units per year, and perhaps as many as 100 units, and we are hopeful that as the requirement is adopted, that additional units would be made available through manufacture.

**Mr. Packard.** Competition-wise, do you feel that the proposed legislation would allow sufficient competition so that it would invite and encourage other companies?

**Ms. Freeman.** We would hope so. Yes, sir.

**Mr. Packard.** That is all I have, Mr. Chairman.

**Mr. Oberstar.** Thank you. The Chair recognizes the gentleman from Texas. Mr. Laughlin.

**Mr. Laughlin.** Mr. Knisely, I find your testimony about the Aviation Trust Fund-confusing. You are not trying to suggest to those of us on this panel that only the international traveler in the State of Minnesota is the only person paying into this Aviation Trust Fund, are you?

**Mr. Knisely.** No, sir. I was not referring to the traveler in Minnesota as an international traveler, sir.

**Mr. Laughlin.** I know you were not. "International" was my word, but you used the example of someone traveling in Minnesota being offended by paying this Aviation Trust Fund fee.

**Mr. Knisely.** No, sir. I do not believe that the traveler—if I could switch to my own State of South Carolina—traveling between Columbia and Charleston, I do not think there would be a reasonable expectation on the part of a domestic traveler, traveling within the boundaries of the United States, that money from the tax on his or her ticket would go for something as readily identifiable as the needs of international travelers at international airports.

**Mr. Laughlin.** Well, wouldn't you expect a person traveling in your State of South Carolina, paying the aviation fee, would have a reasonable expectation that that fee money be spent on aviation safety?

**Mr. Knisely.** On a variety of aviation matters; yes, sir.

**Mr. Laughlin.** And some of the money going into the Aviation Trust Fund is paid by the international traveler also, isn't that true?

**Mr. Knisely.** Yes, sir.

**Mr. Laughlin.** So wouldn't it follow, that some of the money coming from the international traveler could be expected by that international traveler to be for his or her protection while traveling internationally?

**Mr. Knisely.** My understanding is that there are already uses for and expectations for the money that international travelers pay into the trust fund, in terms of activities undertaken in foreign airports.

**Mr. Laughlin.** As I appreciate this legislation, it does not envision taking all the money paid by the traveling aviation public to go to the TNA, is that correct?

**Mr. Knisely.** That is correct.

**Mr. Laughlin.** That is all I have. Thank you.

**Mr. Knisely.** Thank you, sir.

**Mr. Oberstar.** I thank the gentleman. I would just like to follow up on that point. I think it is incomplete, at least, to think that a person in Minnesota, or South Carolina, traveling within the confines of those respective States, is not, in some way, protected by a TNA device established in London.

As we have seen with barometric pressure and timing devices, it is not impossible for checked luggage to start off at Frankfurt and move to Heathrow, go to the United States, wind up in Minnesota, blow up an airplane there.

Mr. KNISELY. Well, that could be possible, Mr. Chairman. I think that since the costs are so minimal to the passengers in international travel and the primary benefit is to them—it would be not unreasonable to let them pay that $1.25 at Heathrow.

Mr. OBERSTAR. Well, I do not want to pursue that. I just want to make the point that I think it is incomplete to think that international aviation is bounded by the borders of the United States.

Mr. KNISELY. I agree, sir, but I think it is a somewhat attenuated risk, at least as far as Columbia is concerned.

Mr. OBERSTAR. Well, we will see. The gentleman from California. Mr. Mineta.

Mr. MINETA. Thank you very much, Mr. Chairman. I want to commend you for having these hearings and ask unanimous consent that my prepared statement be placed in the record.

Mr. OBERSTAR. Without objection, so ordered.

[Mr. Mineta's prepared statement follows:]

### STATEMENT OF NORMAN Y. MINETA, MEMBER OF CONGRESS

Thank you, Mr. Chairman. I commend you for your dedication in demanding results in the area of aviation security. I am glad that you have moved expeditiously after last month's hearing on this topic and have introduced legislation to resolve one area of long-standing debate on this issue.

Your legislation, H.R. 1659 provides Federal funds for the acquisition of explosion detection devices, and I am proud to be a cosponsor of this bill.

Today's hearing will allow us to review recent events and to further investigate methods of improving the safety of air travelers.

I am eager to hear more about the recent actions announced by the Department of Transportation to improve security, and what additional steps, if any, are needed.

I am also looking forward to discussing the Chairman's logical approach to providing the added security of the most advanced explosive detection devices available.

We have known for quite a while that such devices are welcome improvements to current technology. Much work has been done on improved explosion detection devices, and these devices have a proven track record. Yet their implementation has been delayed by turf battles. The FAA, the airlines, and the airports have argued over who will shoulder the burden of paying for these devices. In the meantime, travelers go unprotected.

I am sorry that air travelers have been the victims of these delays, but I am glad to see Chairman Oberstar's bold step to go beyond these disputes to a resolution of the problem.

As many of you know, I have long been frustrated that user fees—fees collected from airline ticket sales, fuel sales, and other sources—go unused as they sit in the transportation trust funds. Many colleagues have joined the Chair and I in our efforts to get these desperately-needed monies spent to improve our transportation networks.

I commend Mr. Oberstar for his proposal to use these funds for explosion detection equipment.

The air travelers whose monies have gone to fill the trust fund coffers can feel that in this instance, their ticket tax has indeed been spent for good purpose—to improve security for air travelers.

I hope the Subcommittee on Aviation and the Committee on Public Works and Transportation moves quickly on this legislation.

Again, thank you, Mr. Chairman, for your leadership on this important issue.

Mr. OBERSTAR. Please proceed.

**Mr. Mineta.** Mr. Secretary, given your statement in opposition to the program, in terms of the funding of this, I am wondering what alternative are you suggesting, then, if you do not feel that the Chairman's approach is the right way to go?

**Mr. Knisely.** Mr. Mineta, we have no difficulty with the TNA devices, or sending out the TNA devices. In terms of funding, however, there is in existence authority for a security surcharge for international travelers. That is a tariff required to be filed with DOT. Many, if not most international travelers are now paying a $5 security surcharge, and we think that by amending that to include the reasonable costs of the devices, over whatever is an appropriate period of time, the minimal costs—using earlier figures of approximately $1.25 per passenger—would be readily achieved through that private-sector vehicle. A pass-through from the carriers, if you will.

**Mr. Mineta.** But by the same token, even that $5 security charge for some carriers becomes a competitive disadvantage because another carrier may not charge any kind of a security fee, and because a competing airline may not have as many flights in, let's say overseas, or an exposure to potential threats, terrorist threats, especially if, let's say, a carrier is 80-percent domestic, 20-percent overseas.

They are not going to have the same feel of threat as someone who is, let's say, 40-percent domestic, 60-percent overseas. They are going to put the $5 surcharge, or whatever the surcharge for security is, but then they are placed at a competitive disadvantage.

Whereas, this way, we sort of level the playing field for everybody, saying, yes, we are saying to the flying passenger—they do not have to really think about whether it safe to get on Brand A or Brand B, or Brand C, because there is an assurance that a certain level, a modicum of security is being done as it relates to baggage.

Baggage screening is something that we have not done, this is a technology that is available, and we want to get it out there as quickly as possible.

If we sit there and wrangle around with whether it is the airport's liability or responsibility, or the airline's responsibility, or whose—it seems to me part of the problem we have had up to this point is the arm wrestling that is going on between the airlines, the airports, as to who is going to be doing this. Is this the airline's responsibility to have the equipment there, or is this the airport's responsibility?

Are they imposing it on the airline? It seems to me we can cut through a lot of that and just go ahead and say, all right, let's get the equipment and deploy it, and we will take it out of the Aviation Trust Fund. It has got close to a $5.8 billion, $5.9 billion unobligated surplus. It is the quickest and cleanest way to get out there.

**Mr. Knisely.** Sir, two comments. One of them is we are not going to see any of these devices built and implemented for a number of months. There is plenty of time to decide on how to fund them.

Second, I think that the difference between competing carriers is not the existing $5 surcharge. We are talking about the marginal $1.25 surcharge, and, first, I think that the Federal Government has to say we cannot level the playing field beyond a certain point.

And I think that $1.25 is well below that point. I myself would much rather fly American carriers with American pilots, and I would not let $1.25 or $10, or something else, stand in the way if I had the choice.

Mr. **Mineta**. But by the same token, if we do not impose the same requirements on foreign carriers——

Mr. **Knisely**. Well, I am not sure we can extend the Monroe Doctrine quite that far, sir. It would take us awhile to work on that.

Mr. **Mineta**. Yes, but if they are going to play in our economic sandlot, fair play seems to say—if you want to fly into my airport in New York, or Miami, or Denver—or wherever—from Athens, or Rio de Janeiro, or from whatever—we are not telling you that you cannot take off from Rio, but I am telling you you cannot land in Denver.

If an airplane has its ELT not working, or some equipment not working, a mandated piece of equipment not on board that airplane, we do not allow it to fly into the United States, and I do not know why we cannot impose this kind of requirement on foreign carriers.

They want to come in and play in our economic sandlot, and they want to take our tourist dollars away from our domestic carriers, then, by golly, they ought to be in the same position of providing that kind of modicum of security to flying passengers.

Mr. **Knisely**. Two quick comments, sir. First, I think we should distinguish between the leveling the playing field between foreign and domestic carriers, and, again, I do not believe the $1.25 will affect that very much.

And second, I think that having the TNA devices may well prove to be a competitive advantage to the domestic carriers because they will have them. They can say if you fly with us rather than the foreign carrier, your baggage will have gone through this system. That is hardly an argument for our funding them, though.

Mr. **Mineta**. There is a point to that. You want to be strip-searched, you go with El Al, and I have subjected myself to that. It was a little shocking at the time, but you feel good getting on the airplane without any clothes. [Laughter.]

Mr. **Mineta**. Not really.

Mr. **Knisely**. That is probably more fun, and a little warmer in Israel than it might be at some places you land here.

Mr. **Mineta**. Right. Let me ask about the timing as it relates to the conference that Secretary Skinner is at right now. Have there been any preliminary discussions on some of these security requirements as they relate to foreign airports? Any preliminary discussions that we hope will be coming out in finalized form at this—is it ICAO, or is it just the ministries of transport?

Mr. **Knisely**. I believe he is going from country to country, perhaps under the aegis of ICAO, but meeting with individual ministries of transport. I do not know the specifics.

Ms. **Freeman**. There have been preliminary discussions on some of these issues including the deployment of TNAs overseas, and we are hoping that the Secretary, on his trip this week, can complete some of the meaningful discussions that have already been taking place with the foreign governments.

Mr. MINETA. And also in terms of the 120 personnel, or so that you were talking about, how many of those are actually being deployed from the domestic security work force? In other words, are we going to be short-changing domestic security inspectors in order to come up with the 120 that we are going to be deploying to overseas posts? Or am I misreading what was given?

Ms. FREEMAN. We had requested 120 additional positions for fiscal year 1990, and what we planned to do was take a significant percentage of those and deploy them overseas, certainly not all of them, and we are studying right now exactly what locations and how many people we would deploy overseas.

What we are hoping to do is to request additional personnel in the following fiscal year, in order to place those personnel in domestic locations that would have otherwise received the additional inspectors.

Mr. MINETA. Is it my understanding that originally, the 120 were going to be used domestically, but because of the need, it was then decided we would ask for the 120, but then, peel off a few for the foreign security inspection piece of it?

Ms. FREEMAN. That is correct. There were a number of the 120 that were going to go overseas, but not as many as we now plan to deploy.

Mr. MINETA. Fine. Thank you very much for your testimony. I think this is, again, an area where all of us can work together to keep everyone's feet to the fire, in order to get equipment out there, deployed as quickly as possible, get the airlines to respond, get the airports to respond, and we can I think make sure that flying is safe for everybody. Thank you very, very much. Thank you, Mr. Chairman, for your leadership.

Mr. OBERSTAR. I thank the former Chairman of the Aviation Subcommittee for those very perceptive and probing questions. Before I call on the gentleman from New York, I want to follow up for just a moment on a number that you have used a couple of times, Mr. Knisely, and that is a $1.25 security surcharge.

Where do you get that information? What is that based on?

Mr. KNISELY. I was using the security surcharge as a vehicle for adding the necessary costs for the TNA devices, and my assumptions for the cost of the TNA devices in any year would be using your legislation. Assume the $50 million available in 1989 as against the 40 million takeoffs and landings in your figure of 40 million passengers per year, and that gives me $1.25 which would be added to the existing security surcharge by carriers who chose to do so.

Mr. OBERSTAR. That is not a number, then, that the Department, or the FAA have settled on as the amount that is likely to be charged by the airlines?

Mr. KNISELY. No, sir. They could add whatever other fees they choose. We do not control the security surcharge. In fact we do not know what they are spending it on.

Mr. OBERSTAR. That is one of the problems of leaving it all up to the airlines, and that brings me to a point. There is an advertisement in the New York Times—by a carrier I will not mention—but it is fairly standard and the numbers apply to all the carriers. This is an ad for travel to various European destinations. Round trip.

"Conditions: $23 fee." That is round trip. "For U.S. departure tax, security surcharge, and customs." That $23 is not included in their fare. We checked that item out, and that includes $3 for the departure tax, $10 for customs and immigration fees, and $10—that is $5 each way—for a security surcharge.

Mr. **Knisely**. Yes, sir. That is correct. So, if we were to count both ways, that would be $2.50 additional on top of the $10, which is the existing security surcharge.

Mr. **Oberstar**. And the American carriers would have to either eat that fee, or tack it on to the fare.

Mr. **Knisely**. Well, no, sir. They would tack that on to the security surcharge, which you correctly note is not required to be included within the fare.

Mr. **Oberstar**. Right. But either they have to eat that amount themselves, take it out of profits, operating expenses or pass it directly on to the passenger——

Mr. **Knisely**. Yes, sir.

Mr. **Oberstar** [continuing]. In the form of an increased fare, which makes then our fares less competitive with foreign carriers, unless they are required to do the same thing, to take it out of their pocket, or out of their passengers' pockets.

Mr. **Knisely**. But I believe, Mr. Chairman and I cannot speak for the airlines and how much they would add for their additional costs of $2.50—but I cannot believe that the playing field is made very unlevel by a charge of $2.50. Mr. Laker is no longer in business. That is not a significant percentage of international fares.

Mr. **Oberstar**. I think fare competition is very important. That is the way people move in international travel. They look for the best deal they can get, and to save whatever they can. You cannot expect the airlines to eat that amount.

Mr. **Knisely**. No, sir.

Mr. **Oberstar**. But more importantly, as I pointed out earlier in this hearing, this really is a national security issue and not just merely an airline matter.

Well, the gentleman from New York. Mr. Boehlert.

Mr. **Boehlert**. Thank you, Mr. Chairman. Mr. Knisely, let me apologize at the outset because I am going to ask you a loaded question, but if I did not apologize and asked you the question, I would have to apologize to my constituents for not asking it. So you understand my dilemma. And the question is this: Are we still hoodwinking the American people with respect to the trust fund, insisting that it must remain on budget? Is that the Administration position?

Mr. **Knisely**. The Administration position—yes, sir—is that the trust fund is to remain on budget.

Mr. **Boehlert**. So that we can mislead the American public into believing the deficit is less than it really is?

Mr. **Knisely**. I am not here to speak for the deficit, sir.

Mr. **Boehlert**. I would like to turn to page 5 of your testimony. First of all, I should qualify what I am going to say by saying I support the bill that is principally under consideration here. I do not see why we have not moved more expeditiously. But you point out that between fiscal year 1980 and 1989, FAA has invested about $45 million for development of TNA and vapor detection technology alone. The "alone" sort of makes me believe like we should be really pleased with that investment of $45 million.

I am not sure that I am, which leads me to this question. Is our research into areas like the development of TNA, and vapor detection technology, is that budget-driven or technology-driven?

Mr. **Knisely**. Let me make an initial answer to that and ask Ms. Freeman to elaborate. We spent that money starting in 1980, so the FAA was ahead of this problem and was looking at explosive detection devices in 1980. Out of the FAA research budgets, about $60 million has been spent on security issues, and of that, about $45 million has been spent out of the R&D budget on vapor detection and TNA.

Mr. **Boehlert**. Right. And Ms. Freeman, that is a lot of money, $45 million. I can understand——

Mr. **Knisely**. As a research expenditure, sir. That is not development; that is not production. But it is a research——

Mr. **Boehlert**. Well, I also have another hat that I wear. I serve on the Committee on Science, Space, and Technology, so I know research is quite expensive. I guess my question then, Ms. Freeman, is: How much was requested? $45 million was obtained and spent on basic research, but what did the people who are doing the research request? The reason I ask if this request is budget-driven or technology-driven, is because I have the feeling that it is budget-driven, so I must admit my prejudice.

I have a feeling that the technical people wanted more, and could have effectively used more, so that we would be further ahead in this stage of development than we are. But because of budget considerations they were told they could not have as much as they wanted.

I find this mindboggling. We have $5.8 billion sitting, unobligated, in the trust fund.

Ms. **Freeman**. I apologize because I do not have the figures available with me on the amounts of money that we have requested in the past, but we can get those figures and submit them for the record.

Mr. **Boehlert**. I would appreciate that, Ms. Freeman, because I think the Chairman, and all the members of this committee would like that information.

[The information received from Ms. Freeman follows:]

For fiscal years 1980 through 1989, FAA has requested $65 million for the security research and development program; appropriations received totaled $61 million.

Mr. **Boehlert**. We just are really concerned, and rather than sitting idly by and witnessing the problem go on, ad infinitum, we want to be a part of the solution, and I think we have an easy path, and very few times in this business do you have an easy path to something. But we have an easy path to do what we want to do, and that is to take legislation like this, get it implemented, get that money spent, and get those TNA systems into our high-threat airports. That makes a lot of sense to me.

That exhausts my questions for now, Mr. Chairman.

Mr. **Oberstar**. Thank you. I appreciate those points, and I think the information the gentleman has requested will be very important for our deliberations. The gentleman from Virginia. Mr. Payne.

Mr. **Payne**. Thank you, Mr. Chairman, and thank you for holding this important hearing, and I would request unanimous consent to revise and extend my remarks, and have my statement put in the record.

Mr. **Oberstar**. Without objection, the gentleman's statement will be included in the record at this point.

Mr. **Payne**. Thank you, Mr. Chairman.

[Mr. Payne's prepared statement follows:]

### Statement of Lewis F. Payne, Jr., Member of Congress

Mr. Chairman, I want to applaud you on your leadership in the area of aviation security. I appreciate your interest and concern for the well-being of the travelling public and know that many others share my sentiments.

The hearings held last month were very informative and reinforced my belief that we must take some type of action to battle the terrorists that threaten our airline security. I applaud the security measures the Secretary of Transportation announced earlier this month. I know that by working together, we will provide better security for the flying public.

It is of vital importance that we move forward in our efforts to fight the terrorists who threaten air safety. We must strive to be one step ahead of these terrorists, instead of reacting to them and implementing security measures to plug the holes they have found in the system.

The actions proposed in H.R. 1659 will go a long way in protecting the travelling public, and I thank you, Mr. Chairman, for your leadership in this important matter.

Mr. **Payne**. Mr. Knisely, first, I think the work that the Department of Transportation has done is admirable. I think you have moved very quickly on this matter, and I am looking forward to results, as we work together to try to overcome what I think we all agree is a problem that needs to be addressed immediately. Let me ask about the TNA technology and how it gets paid for.

It seems to me that as we began these hearings several weeks ago, we talked about the necessity of trying to get ahead of the terrorist, and not continue to stay behind and respond to the latest incident. And it seems to me that one of the things that we may likely do in the future is expand the TNA technology domestically, and that we would do that by beginning at major hubs, perhaps, and then, as necessary, expand beyond that.

Would you agree, if in fact we did that, that the way that it should be paid for in that instance is from the trust fund?

Mr. **Knisely**. That would be a reasonable way to pay for large-scale domestic implementation. Yes, sir.

Mr. **Payne**. So that we would have some airports in the country that would be paid out of the trust fund, and some other airports that would be paid out of the surcharge?

Mr. **Knisely**. We are trying to implement this technology as rapidly as possible. I think primarily foreign airports would be involved with the surcharge, and I am sure there is a way to work through that difficulty, when and if we have the technology. As you know, sir, the problems here are not just in funding. First, we need to get the technology on the street, and second, it probably will evolve, as was brought out earlier.

Third, the foreign airports have not at all necessarily agreed that the technology should be put in place there, and, fourth, as has come up several times, the issue of whether foreign carriers should be required to employ the technology is also an issue.

Mr. **Payne**. Regarding the surcharge, as I understand it there is already a $5 surcharge?

Mr. **Knisely**. Each way; yes, sir.

Mr. **Payne**. But we do not know what is being done with the $5?

Mr. **Knisely**. That is correct, sir.

Mr. **Payne**. Do we have a way of ensuring that the additional $1.25—or whatever that amount might be—would in fact be used for the TNA technology?

Mr. **Knisely**. The Chairman's bill would and the Secretary has initiated regulatory action requiring the implementation of the TNA technology. The carriers will respond by implementing the technology, and I think we can assume that whatever fee they would add on in the tariff would represent those costs.

Mr. **Payne**. And you would expect that to be consistent—the fees, the $1.25, for instance, would be consistent among airlines?

Mr. **Knisely**. I think that that would be a reasonable assumption. Again, I think that the numbers are so small that they do not represent an unleveling of the playing field, either domestically or internationally.

Mr. **Payne**. Then the TNA devices would be owned by the various airlines because they would be the ones who would collect the money, have the money, purchase and then implement the device?

Mr. **Knisely**. Yes, sir.

Mr. **Payne**. Is that the most efficient way, given the operation of the airports? Is that the most efficient way, for them to be owned and operated?

Mr. **Knisely**. I believe so, sir. I believe they own the x-ray and the metal-detecting devices, and if it is their box, they would like to keep it working.

Mr. **Payne**. But in terms of the way—I am asking this because I do not know—but the way that baggage is handled, each airline then would have its own area in which it takes care of its own baggage, and you would not mix baggage of various airlines?

Ms. **Freeman**. We would expect that as they do now with other security equipment, we would expect that the airlines would work out agreements amongst themselves to share some of this equipment.

Mr. **Payne**. Mr. Chairman, no further questions. Thank you very much.

Mr. **Knisely**. Thank you, sir.

Mr. **Oberstar**. Thank you. The Chair recognizes the gentleman from Pennsylvania. Mr. Kolter.

Mr. **Kolter**. Thank you, Mr. Chairman. I have to apologize for missing so much of this interrogation here, but I have one question, that bothers me, Mr. Knisely, and I am going to ask Mr. Lally the same question when he appears before us here, shortly.

As I fly weekly, back and forth, I see catering and aircraft service personnel coming and going, at will, driving their vehicles to and from the airplanes, and it kind of makes me a little bit uncomfortable, knowing full well that there has been some instances, for example, where some aircraft have been known to carry drugs from south of the border, and how they get on a plane, the Lord only knows.

My question to you, sir, would be, is the FAA going to consider some way of controlling these people coming and going, who seem to be coming and going at will, or are they under control today?

Mr. **Knisely**. Ms. Freeman would be delighted to answer that question, sir.

Ms. **Freeman**. Thank you. We currently have in place a number of security measures that apply to servicing personnel, including background checks, and at certain airports including a screening of servicing personnel. We are hoping that the automated access control rule that we have been speaking about this morning will also go a long way to insuring security as it concerns those personnel having access to those areas.

Mr. **Kolter**. So what you are telling me is that at this point in time, you are satisfied with the way they are operated today?

Ms. **Freeman**. We do have a number of requirements, and we do inspect those requirements. There are times when we have found noncompliance, and where that has been the case we have pursued enforcement action. But we are satisfied with our requirements. Yes, sir.

Mr. **Kolter**. Thank you very kindly.

Mr. **Oberstar**. Just a couple of follow-up questions. Under the departmental proposal for controlling access to airport operations areas, the airports would be held responsible for mistakes. For example, if a fixed-base operator neglected to tell the access computer that one of its employees had been fired, the airport, rather than the fixed-base operator, would be subject to enforcement action and to a civil penalty. Well, I just wonder about that. Supposing we were to change that approach somewhat, providing that an airport would not be subject to strict liability if the airport has entered into an agreement with the fixed-base operator, or operators. That the airport would collect damages from the FBO, in the case that this FBO violates security regulations.

Ms. **Freeman**. Let me start out by saying that we would welcome those types of agreements between the airport operators and its tenants, but what we would prefer to do is to continue to regulate the airport operators and have the single point of contact, and the single point of accountability, and then let the airport operator work those agreements out with its tenants, and perhaps even include hold harmless clauses, or damages in its agreements with the tenants, but still have the Federal Government have that single point of contact which would be the airport operator.

Mr. **Oberstar**. How many airport operators are there in the United States?

Ms. **Freeman**. Approximately 420 airport operators that are subject to our regulations.

Mr. **Oberstar**. 420. How many FBOs are there?

Ms. **Freeman**. I would imagine thousands.

Mr. **Oberstar**. From a regulatory standpoint, you would rather control 420 than 4000?

Ms. **Freeman**. That is correct, Mr. Chairman. We would also expect that this could be extended downward to subcontractors as well, because I imagine that each of those tenants probably has a number of subcontractors that it is responsible for.

Mr. **Oberstar**. This matter of strict liability for the airport operator is very troublesome, and I think burdensome. We do need to have a means of getting at security violations, but that is something I think we need to think through a little further, as we need to think further about some notes I made on compatibility of access doors.

You have a crew member that may have five stops in a day. Is that crew member going to have to have five separate cards for five separate access doors? And supposing the next day when they go to five other stops, and five other access doors. What about the burdens and the problems? What about the FBOs? How many access door cards are they going to have to have to get in?

The FAA has set an August 8 deadline for compliance, but they have not put out an advisory circular yet, according to my research on this matter, and our staff research on it.

Ms. **Freeman**. On the advisory circular, we are very close to issuing an advisory circular, I would say within the next couple of weeks. It is undergoing internal coordination at this time, but, in addition, we have had continuing briefings with our FAA regional personnel on the items that are in the advisory circular, so that they can be working with the airport operators, and they are working with the airport operators to ensure implementation of the rule.

With respect to the compatibility issue, we did consider that and decided, finally, that while it is an issue of concern certainly to some of the air carrier pilots, we felt that it was an issue that should be resolved by industry rather than mandated by the Federal Government, because it would be of benefit to a few of the users of the airports and we felt would drive the system costs up tremendously, if we required one big national system.

There would also be difficulties in addressing who would be responsible for running the entire national system, and who would be accountable where there was a breach of the national system.

We understand that a committee has been set up following our presentation at the latest Airport Operators Council International (AOCI) seminar that we attended. We understand that a committee has been set up by that organization to study the feasibility of airport operators getting together and coming up with a compatible system.

Mr. **Oberstar**. That is good to hear. I certainly think we need to have compatibility in this security matter, so sensitive but also so significant to aviation of all modes of transportation that move so quickly, and from north to south, east to west in this country.

There are a number of other questions I would like to pursue, but I think we have kept you here for a good long time, and we may want to call you back and pursue some points raised by other witnesses, and so at this time we will hold you excused, unless the gentleman from Arkansas has something.

[Pause.]

Mr. **Oberstar**. Thank you very much. We will hold you excused at this time.

Mr. **Knisely**. Thank you, sir.

**Mr. Oberstar.** Thank you very much for your frank and straightforward statements.

[Mr. Knisely's prepared statement follows:]

## STATEMENT OF ROBERT KNISELY, DEPUTY ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS, DEPARTMENT OF TRANSPORTATION

Mr. Chairman and Members of the Subcommittee, I welcome the opportunity to appear before the Subcommittee today to discuss the Department of Transportation's views concerning H.R. 1659. With me today is Ms. Darlene Freeman, Deputy Director of the FAA's Office of Civil Aviation Security.

As you know, Secretary Skinner is in Europe this week to maintain the momentum of February's ICAO Aviation Conference in Montreal and build a unified approach to improved aviation security. He announced his specific agenda for security initiatives April 3, following his and the President's meetings with Pan Am 103 families. He is meeting this week with officials in Italy, West Germany, Switzerland, the United Kingdom, and France, and one subject will be the placement of explosives detection technology abroad. Use of the TNA devices overseas requires diplomatic and technical coordination, and he hopes to facilitate that process. We must be ready to place the equipment where it is most needed as soon as it is manufactured.

Before outlining the Department's views concerning H.R. 1659, I would first like to describe briefly for you several major security initiatives which Secretary Skinner has announced since his March 23 appearance before this Subcommittee. These initiatives include:

Requiring deployment of explosives detection systems such as the Thermal Neutron Analysis (TNA) device at the busiest airports in the U.S. and overseas where U.S. airlines operate. The U.S. will immediately initiate negotiations with foreign governments regarding installation of these systems at foreign airports, consistent with the Secretary's European initiative.

Assigning additional FAA security specialists to provide greater surveillance and assistance to U.S. carriers operating ast the busiest airports in the U.S. and overseas.

Improving the FAA security bulletin process through which important security information is disseminated to the aviation community, in a variety of ways, including:

making compliance by U.S. air carriers with such directives mandatory;

requiring acknowledged receipt within 24 hours;

requiring carriers to submit to FAA within 72 hours specific information on how they plan to carry out preventative measures; and

ensuring that specific information in security bulletins is distributed to pilots-in-command of airline flights.

Elevating standards for x-ray and metal detection equipment to assure that U.S. air carriers are using state-of-the-art equipment.

Forming a National Aviation Security Advisory Committee to provide a forum for the exchange and coordination of security programs and research and development designed to further enhance aviation security.

Conducting a top to bottom review and evaluation by FAA of how well U.S. air carriers are complying with security requirements. This effort will look at each airline's resources and general philosophy toward security.

Discussing with foreign governments new procedures for more effective coordination of the international assessment and dissemination of security information and countermeasures.

All of these measures are being address with a high sense of priority. The fight against terrorism is one of Secretary Skinner's highest priorities.

I would like to turn now to a brief discussion of H.R. 1659, which is pending before the Subcommittee. H.R. 1659 would require the FAA Administrator, within 60 days after the bill's enactment, the mandate the installation and use by air carriers, at selected airports domestically and overseas, of explosive detection equipment equivalent to or better than TNA technology. The bill would also establish a grant program through which air carriers could receive up to $200 million in reimbursement for the purchase and installation of required explosive detection equipment. The $100 million would be available commencing with $50 million in grant authority in FY 1989. The legislation would also make available an additional $170 million in grant authority ($85 million in FY 89) under the Airport Improvement Act for airports to purchase and install equipment needed to comply with FAA regulatory requirements regarding controlled access to secured areas of airports.

Although we recognize and fully appreciate your intent in proposing H.R. 1659, we do not support its enactment. The Secretary has already announced that the FAA will act to require explosive detection equipment such as the TNA at appropriate airports here and overseas. The FAA already possesses ample authority to issue such a requirement, and, as previously noted, this matter is a high priority with us. We have already begun efforts to define the nature of the equipment to be required along with a timetable and priority schedule. Legislation is not needed to facilitate our efforts in this area. We would ask only for the Subcommittee's continued support as we move forward to achieve the benefits of the state-of-the-art explosive detection technology on which we have worked for so long.

We also do not believe that there is a need for Federal funding of explosive detection equipment as contemplated by the bill's proposed $100 million grant program. The Secretary has considered various funding options for TNA-type equipment, and concluded that there is not sufficient reason to alter the existing framework under which air carriers are responsible for meeting FAA imposed security requirements. In fact, this framework is no different than that which exists for any other FAA regulatory requirements—such as TCAS collision avoidance systems—even if costs to the regulated party may be associated with their installation.

We agree that there is a need for a strong Federal presence in the security area, and the Federal Government has played a significant role. Between FY 1980 and 1989, for example, FAA has invested about $45 million for development of TNA and vapor detection technology alone. Additionally, we are increasing our security staff by 56 inspectors this year, and we are seeking in our FY 1990 budget an additional 120 security inspectors who will work closely with airports and airlines, here and abroad, to improve security. Our presence overseas will be strengthened as part of this increased staffing effort. These are legitimate facets of an appropriate Federal role, and we intend to continue to play a strong, active role in combatting the threat of terrorism.

We also do not support the bill's increased grant authority of $170 million to be made available to airport operators for purchasing and installing equipment to carry out FAA requirements related to access to secured areas. Airport operators may already use their entitlement grant fuels under existing Airport Improvement Program grant authority to defray from 75 to 90% of the costs of required security equipment if they choose. It is an airport operator's choice as to how to spend entitlement funds among various eligible projects. We do not favor provisions that would fund 100% of any eligible program, or increasing the overall grant program to assist airports in complying with FAA's recent rulemaking on secured access.

In closing, Mr. Chairman, I would like to stress that we appreciate the Subcommittee's interest in working to help improve the security of our air transportation system. We look forward to working closely with you and Members of this Subcommittee to strengthen our Nation's ability to respond to terrorist threats.

That completes my prepared statement, Mr. Chairman. I would be pleased to respond to questions you may have at this time.

Mr. **Oberstar**. Our next witness is Mr. Richard Lally, Director of Security for the Air Transportation Association.

Mr. Lally, we appreciated your testimony at the March hearing of the Subcommittee on Aviation. You were very helpful and I think you presented a great deal of information that has been useful in our continuing deliberation on this matter. We respect your very long service in aviation security which has been noted in the previous hearing, and we will not repeat it here except to say that you have standing on this matter of great respect.

## TESTIMONY OF RICHARD F. LALLY, DIRECTOR OF SECURITY, AIR TRANSPORT ASSOCIATION

Mr. **Lally**. Thank you, Mr. Chairman. I am pleased to have this opportunity to again discuss civil aviation security with the subcommittee, especially the legislation you have introduced, Mr. Chairman, that would require installation and use of explosives detection equipment.

In commenting on the proposed legislation, I would like to include some general observations on the quality of aviation security and the threat facing aviation security today.

First of all, I think it is very important to note that U.S. flag carrier operations are safe, and are secure, despite some misguided advice that has been circulated to the public that perhaps that is not the case.

I can assure you, from my own personal view, that U.S. air carrier operations are safe and are secure.

Mr. **Oberstar**. If the gentlemen would yield at that point. I would just like to interrupt, to point out that—and I do not remember if I referred to these numbers in the previous hearing—but since 1969, U.S. airlines have screened 9.5 billion pieces of luggage, processed 9 billion passengers, detected 46,000 weapons, made 14,000 arrests, and at last count there were 1400 people serving a sentence for trying to move weapons through airports in contravention of law. That works out to a very good security record.

We went from a skyjacking every two weeks down to zero, and in fact, it is probably safer, on a statistical basis, to move through the airlines than it is to use an elevator in this country. There were more deaths from elevator failures last year than there were from skyjackings. The gentleman may proceed.

Mr. **Lally**. Thank you, sir. I agree. The record of the U.S. airlines is unmatched and it is a remarkable accomplishment in the security field. The security measures practiced by U.S. flag carriers operating out of the 45 high-risk airports in Europe and the Middle East were strengthened by the extraordinary security measures that were introduced in the summer of 1985, and were made even more stringent as the years went by.

Following the bombing of Pan Am 103, they were strengthened much more, so that today, the security measures practiced by U.S. air carriers operating out of the 45 high-threat airports in Europe, the Middle East, and the Far East, are clearly superior to those practiced by foreign air carriers.

We think the level of security provided by U.S. carriers is unmatched. There might be a few foreign carriers that can say, "We can do as well," but I am convinced that none can say, "We can do better."

So we feel, as mentioned earlier by the Chairman, and other members of the subcommittee, that there is a serious gap in the U.S. civil aviation security requirements. That is that the FAA regulations do not extend to the foreign air carriers, so that the same stringent security measures are not imposed on them for the same operations, from the same high-risk airports, to the United States, even though probably most of their passengers are U.S. citizens.

We think that is a serious gap and one that should be corrected, and we have so recommended, to the Executive Branch, and to this committee and to other committees of Congress.

The other point I would like to make is that over the past 3, 4, 5 years, there has been a very noticeable change in the threat facing civil aviation, and I think that the sabotage of Pan Am Flight 103 was the convincing piece of evidence, that today's threat is different from the threat that civil aviation faced in the 1960's and 1970's.

Today's threat is the threat of sabotage committed by international terrorists as opposed to the threat of hijacking committed by people who primarily wanted free transportation.

And given the nature of that threat, we think that it calls for a different response. Clearly, the terrorists who were responsible for the bombing of Pan Am Flight 103 did not have a grudge against any passenger on that flight, or a crew member, or the airline itself. The target of that attack was the U.S. Government. The object of terrorist attacks, in general, is political in nature, and aimed at influencing the behavior and policies of governments.

So we feel that today's problem, today's threat, calls for a reevaluation, a reexamination, of the role of Government. Government needs to depart from and expand on its traditional regulatory response to become one of active involvement in the defenses against terrorist acts.

So we feel that the FAA should primarily provide more assistance at the high-threat locations. We suggest to FAA that the experts they have—and they are truly talented experts—need to be reassigned in significant numbers to the high-risk areas of the world where they can work hand-in-hand with the airlines to provide continuous and direct assistance in accomplishing the extraordinary security requirements that are in place today.

At the same time these experts can coordinate and interact with the host governments to assure that the total security posture at those airports is adequate for U.S. air carrier operations.

In a sense, the presence of those security experts would constitute a continuing assessment of the security of those airports. They are in fact the 45 high-threat airports in the world, and if assessments are needed, they are needed at these locations more than anywhere else, and there is no reason why that presence could not constitute that continuing assessment.

The next form of Government assistance needed is covered in your bill, Mr. Chairman, that is that we need Government to expedite the availability of high technology to meet today's problem of detecting explosives.

The emergence of thermal neutron analysis equipment is the first product that has emerged out of a long-range FAA R&D program. FAA is to be commended for that accomplishment.

We think that given the nature of the threat, and the need for Government involvement, that it is appropriate that this equipment, particularly the first generation of this equipment at the high-threat airports, be funded by the Government.

So we therefore support your bill that would require the installation and use of this equipment at the high-risk airports of the world, and we support your proposal that the funding be provided by the Federal Government.

But we would make one additional observation, and that is, given the nature of the threat, and as has been mentioned here earlier, we are really facing a national security problem. So that it may be even more appropriate for this funding to come out of the general appropriations of Government, the tax structure, as has been mentioned also.

But, at any rate, we feel that Government funding of this equipment, and the presence of Federal Aviation security experts at high-risk locations will send loud and convincing signals around the world, that the U.S. Government is actively involved in protecting U.S. flag-carrier operations from acts of terrorism, and that these carriers are no longer exposed, on their own, as attractive and vulnerable targets.

We agree also with the limitation in your bill that would not automatically require the installation and use of this equipment at U.S. airports, but, rather, authorizes the administrator to undertake such requirements as the threat warrants.

We think that fortunately, the same threat does not exist domestically, as it does in Europe and the Middle East, and the need for that equipment at U.S. airports does not exist at the present time.

With regard to the overall need for Federal assistance, I feel that that is absolutely essential. If the Federal Government found it necessary to protect, by military convoy, the operations of maritime interests in transporting oil in the Persian Gulf, then it seems to us to be just as appropriate and necessary for the Federal Government to provide protection for the transportation of U.S. citizens, by U.S. air carriers, from the same areas of the world, who are subject to the same threat.

On the subject of airport access doors, we agree with the objectives of the FAA rule; however, we think that the implementation of that rule ought to be on a more studied and deliberate basis.

The ATA joined with other elements of the aviation industry in this country, and as recently as last March petitioned Secretary Skinner to take another look at that regulatory requirement, and take advantage of the recommendations of the industry as a whole to approach that problem on a pilot project basis, to allow the airport operators and others who would be affected by the requirement to gain experience. Then full implementation of the rule could proceed in a more efficient and more effective way to accomplish the results, and we would probably have a better product in the long-run, than going at it as now proposed.

In addition, we believe that the funding that would be saved by a more deliberate implementation of that rule would be better directed toward the higher threat that exists in the form of terrorism at high-risk airports overseas. In this period of austerity and scarce resources, our investments would pay better dividends if approved on that priority basis.

Mr. Chairman, that I think concludes the observations I wanted to make. My full statement is submitted for the record.

Mr. **Oberstar**. Your complete statement will be included in the record in full.

Thank you very much, Mr. Lally. I, again, greatly appreciate your thoughts on various aspects of the pending bill, and overall. I have a few security questions facing the air-traveling public, and airlines and airports.

Your statement points out that there are different security rules for foreign carriers than U.S. carriers. Could you be more specific about those differences, and whether there are some competitive advantages for them, and disadvantages for our carriers as a result.

Mr. **Lally**. Well, the differences are immense, really. The extraordinary security measures that are practiced by U.S. air carriers range from the inspection of each and every piece of checked baggage, to the guarding of aircraft, to the supplemental or redundant screening of passengers and to the inspection of people who service aircraft.

Basically, none of those procedures are implemented by all foreign carriers on a routine basis, as they are by U.S. carriers. So that there is, I think, a significant disparity in the level of security. That also results in disparate levels of expenses incurred by the two classes of carriers. There is no "free lunch;" the extraordinary security measures are costly. They are in fact very costly. So that the fact that a foreign air carrier does not have to implement the same measures, results in a reduction in the costs of that carrier's operations.

However, while there are competitive aspects to this, to me, the difference really is in the disparate level of security that is provided the passengers, the flying public who travel on both U.S. and foreign carriers. They are getting extraordinary security protection by U.S. carriers, and the same extraordinary security requirements do not exist, or do not apply to the operations of foreign air carriers.

So there are different levels of security, that result also in different costs.

Mr. OBERSTAR. So, in summary, you concur that there are some cost advantages, at least, for foreign air carriers in competition with the United States?

Mr. LALLY. Yes, sir. There are. As you mentioned earlier, the U.S. air carriers are private-sector organizations in business to make a profit, and unless they make a profit they do not stay in business. And there are only two ways to make a profit: one is to generate more revenue and the other is to reduce costs.

So that that basic fundamental fact exists. The U.S. air carriers are incurring higher cost. The passengers on U.S. air carriers, however, are receiving greater benefits in the form of increased security.

Mr. OBERSTAR. Of course that is very important. The bottom line is security and arriving safely at your destination. But how is security provided for Alitalia, for example? Do they have a surcharge? Does the government put protection——

Mr. LALLY. To my knowledge, Alitalia does not have a surcharge, and I do not know the extent to which they are subsidized by the Italian government. The U.S. carriers—I think not all of them—but several U.S. air carriers adopted a $5 transatlantic security surcharge following the introduction of the extraordinary security measures in the summer of 1985. The surcharge was for costs incurred for those extraordinary security measures.

The introduction of new security requirements following Pan Am 103, raised the costs, again, of security, but the carriers have not raised the surcharge.

Mr. OBERSTAR. You would have to raise the surcharge to accommodate the new regulations, if put into effect on thermal neutron analysis devices and other devices, wouldn't you?

Mr. LALLY. Well, that would be a carrier option. Not every carrier adopted the $5 surcharge, and there would not be a requirement that every air carrier adopt a security surcharge, or that the security surcharge adopted by carriers be identical. There would be the option of the carriers to do that.

Mr. **Oberstar**. Secretary Knisely suggested a $1.25 additional surcharge cost to accommodate the cost of TNA. Have you given that some thought and analysis?

Mr. **Lally**. Not really. We believe, very strongly, that TNA's ought to be federally funded and I have not done the arithmetic. I recognize what he did was use the number of international emplanements and the $100 million figure proposed in your bill, to arrive at his figure. It may or may not be an accurate figure. I do not know.

Mr. **Oberstar**. Does that $5 item cover all of your costs of providing security? That x-ray machines, the metal detectors, the personnel?

Mr. **Lally**. No, sir. The $5 is only levied by four airlines, I think, for transatlantic operations. It does not cover at all, nor does any security surcharge cover the domestic costs. It has been estimated—although it is just an estimate—that the U.S. carriers' expense, annually, for security, is in the area of $500 million for total security costs. And there is no surcharge identified or dedicated for that expense.

Mr. **Oberstar**. Would you give me that number again. $500 million for security, by all airlines? Is that what you are saying?

Mr. **Lally**. Yes, sir. That is the estimate we have given. As best I can break that down, is that the estimate for passenger screening alone, in the United States, is $250 million. Now, if we add the costs of the extraordinary security measures that are in place, together with the other expenses associated with security, other than passenger screening, I think a doubling to the $500 million level is a fairly accurate estimate, but truly an estimate.

Mr. **Oberstar**. With those numbers in mind, it is not as though the airlines are not paying a fair share of the costs of security, in a broad sense.

Mr. **Lally**. No. The airlines are paying every cent of the cost for security. There is no other cost-recovery mechanism. And security is expensive.

Mr. **Oberstar**. And that security cost is factored into the ticket, the fare, in some way, isn't it?

Mr. **Lally**. Security costs are considered just like any other operational cost—maintenance, fuel, wages—and those costs are defrayed through the revenues obtained from ticket sales.

Mr. **Oberstar**. But now to go to a higher level of technology to meet a new and unmeasurable threat—and that is random terrorism, random destruction of aircraft—requires higher costs, and a different yardstick for measuring security. You have said that in your testimony. That has been my sense from the earlier hearings, and my analysis of the dimension of the threat to the United States.

It really is the United States that is the target. Our policy, our presence as a Government overseas. It is not as though the terrorists are going after a particular U.S. carrier, and, as Secretary Knisely suggested, tomorrow, it may be a foreign carrier or another government.

And just as you pointed out so well, we reflagged foreign vessels to move Persian Gulf oil, but planted the U.S. flag on the deck of ships built in foreign shipyards, with foreign crews, put a U.S. captain on board. Only 6 percent of that oil came to the United States and yet the taxpayers bore the cost.

Now maybe we should get the Defense Department to pick up the cost of TNA, or the State Department. Maybe it ought to come out of another budget, but I do think it is a public responsibility.

Should we include the vapor detection devices in our legislation, as a requirement, at least on an interim basis?

Mr. LALLY. Yes, sir. We feel you should. I should have mentioned that.

Mr. OBERSTAR. You did in your written testimony.

Mr. LALLY. Yes. We think that TNA has passed the FAA muster, but that there are other techniques that are showing very great promise. Specifically there are recent reports of successful FAA testing of vapor detectors at the technical center in New Jersey.

So we believe that the legislation ought to permit the administrator to approve the use of such equipment on an interim basis. Even though it may fall a little bit short of the goals, or standards met by TNA, it would still serve as a better tool to detect explosives than the alternative measures, of x-ray and physical inspection.

Mr. OBERSTAR. Thank you, Mr. Lally. I may have another question or two, and I want to yield at this time to the gentleman from Pennsylvania. Mr. Clinger.

Mr. CLINGER. Thank you, Mr. Chairman. In your view, the vapor detection devices are at a point now where they could be installed immediately?

Mr. LALLY. Well, there is one vapor detector that I think is on the shelf and could be used right now. There is another one that is a bit more exotic, I think, that is going into production, and would be available in the relatively short term. That is the one that was recently tested by the FAA.

Mr. CLINGER. And you would see these as an interim solution to ultimately be phased out and replaced by the TNA?

Mr. LALLY. Well, no, I think there would be room for them to continue to supplement TNA. They have characteristics and application that TNA does not. TNA, while not completely stationary, is less portable than the vapor detectors. The vapor detectors could go on an airplane, or could examine a public locker, or could be moved to examine a suspect bag, while the TNA would have to function in a more stationary mode.

So I look at them, really, as not so much competing technologies but complementary technologies.

Mr. CLINGER. They are both designed to do basically the same job, aren't they?

Mr. LALLY. Yes. They are both designed to detect explosives.

Mr. CLINGER. But you are saying that perhaps we need both?

Mr. LALLY. I am not technically competent on that. I think that the one vapor detector has been reported by FAA as having the ability to detect small quantities of plastic explosive in checked baggage, and that is the objective of these measures.

The extent to which the other one has that detection capability I do not know, but the other one I believe is the one that FAA stated earlier that they intend to put through the same test at the technical center next month.

Mr. CLINGER. You indicated that the entire cost of security, domestically, is being borne by the industry, but it is true, is it not, that the Federal Government has invested significant resources in research and development on these very devices that we are discussing?

Mr. LALLY. That is true, there is no doubt about that. The FAA has done a remarkable job in security R&D, accomplishing what they did while other governments that have been at the same task just as long, have not produced the same results.

Mr. CLINGER. With regard to your proposal that foreign air carriers be required to undertake the same security measures that we are imposing upon U.S. flag carriers which, ideally, we would all like to see a uniformity in terms of what all airlines are required to undertake for security purposes, but it seems to me there may be some problems with that. We would be imposing, basically, a unilateral set of U.S. standards on foreign air carriers operating on foreign soil.

Isn't that going a little fast? Wouldn't we be better off to engage in negotiations with the foreign state before we try to impose U.S. standards?

Mr. LALLY. Well, I would like to answer that sort of "yes and no." Yes, we should always, I think, negotiate, and yes, I think ICAO is an avenue to pursue negotiations, but those are long-range endeavors—you know—really very noble objectives but hard to accomplish and requiring a lot of time.

The FAA faced up to the question of authority to impose security requirements on foreign air carriers overseas in 1975, I think it was. The regulation that was on the books, until just revised, required foreign air carriers operating flights to and from the United States to have security programs that included the screening of passengers and baggage, et cetera, and to provide FAA information about those programs upon request.

And FAA, over the years—it is my recollection—have inspected the compliance of foreign air carriers with those regulatory requirements, and have, on occasion, actually taken enforcement action for carrier failure to comply.

So, the question of authority to extend these requirements to foreign air carriers has been faced, and answered in 1975. The only difference now is the degree to which that authority is exercised. We are saying that that authority should be exercised to the extent necessary, to impose the same security requirements on foreign air carriers serving the United States from the same 45 high-threat airports in Europe and the Middle East. I do not think there is any question of authority.

Mr. CLINGER. So basically you are saying that we would not be establishing any precedent here?

Mr. LALLY. No, we would not.

Mr. CLINGER. That the precedent was established in 1975. This would be somewhat of an enlargement, I guess, of what we would be expecting the foreign carriers to be engaged in, but that it should not come as a surprise to them that we would be requesting them to do that?

Mr. **Lally**. No. I do not mean to say that it would not be controversial, either.

Mr. **Clinger**. Right. Your position is that security equipment which is required by the legislation should be funded by the Federal Government, and, as you know, the Administration takes a different view of that.

And I guess one of the concerns is that if we were to make the money available out of the trust fund, would you have any concern that it might result in the Appropriations Committee eliminating safety and capacity money in order to fund this? If there was a question of how much are we going to do, there might be a tradeoff here. Would that concern you?

Mr. **Lally**. Well, I think it probably would concern the airlines because there are a lot of very vital capacity needs, and other system requirements. So I think that would be a matter of concern to the airlines, but that question goes a little bit beyond the purview of my jurisdiction, so I could not really comment, in detail, on that.

Mr. **Clinger**. It is possible that an amendment will be offered to the legislation we are considering which would require passengers on commuter carriers to go through security checkpoints at airports if those facilities are on airport property. Is this a problem at airports which would be affected by such an amendment?

Mr. **Lally**. Well, I do not think an amendment is necessary. I think the FAA has adequate authority and the regulatory scheme that is in place, that was explained by Ms. Freeman, covers those operations. The FAA has said to the carriers that operate 60-seat aircraft, you must have the full nine yards of security. For 30- to 60-seat aircraft, commuter carriers can, if they want, screen their passengers, for facilitation purposes, and many of them do.

I do not think that a security threat exists with respect to those smaller aircraft operations, that would warrant an automatic regulatory requirement that they conduct security screening. I think the scheme that exists today, that permits such screening as is necessary to promote facilitation—is the desirable one.

Mr. **Clinger**. Finally, with regard to your suggestion that the payment for these devices come out of the general revenue instead of the trust fund, why do you think your approach makes more sense than the approach proposed in the legislation?

Mr. **Lally**. I think it would make it very clear that we are talking about the threat of terrorism which is aimed at governments, and we are talking about a public responsibility of the Federal Government, public safety, protecting its citizens against criminal acts, particularly when those acts are committed by terrorists whose objective is to influence the behavior of the Federal Government.

I think we are not talking about, truly, a transportation problem. We are talking about a governmental problem, a threat to our Government. Therefore, funding from the general fund—if that is the correct term—would be more appropriate than from the trust fund, and by its very enactment would send a loud signal. It would establish a commitment, a recognition that this is a Government problem and that the Government is acting, not just pushing a regulatory button requiring action by the private sector to solve what is basically a Government problem.

Mr. CLINGER. I hear what you are saying. I think perhaps, though, that to be realistic, with the deficit crisis that we are dealing with, it may be very difficult to make that case persuasively to our Appropriations Committee.

Thank you very much, Mr. Chairman.

Mr. OBERSTAR. I would like to follow up on that. I think the gentleman from Pennsylvania pursued a very important line of questioning, and I took notes in reading your testimony last night, about the appeal to take monies out of general revenues, in addition to, perhaps, the trust fund.

But we have provided contract authority in this legislation with a very deliberate purpose. That is to make sure that the money will be spent, that it will be available for what may be long-term payouts of the cost of putting these devices into place, and also to make sure that the money will be available and not be taken from other sources.

If general revenues are to be used for this purpose—and mark my words, as a member of the Budget Committee—that is going up to the discretion of the full Appropriations Committee in making their 302(b) allocations to subcommittees, and the Transportation Subcommittee will then take a look at its overall spending authority, and say, well, we are going to have to spread this around. If this is a priority, it is going to have to come out of some other money because we are not expanding the universe of dollars available.

I want to see it come out of the trust fund. I want to see it in contract authority. I want to make sure that that money is available, just like we did on the highway program. The highway program was a very visionary approach to funding, recognizing it was going to take a long time from design and engineering through to construction, and therefore, money needed to be available. States had to be able to count on that money being available. The contractor who will provide TNA has to know now, this year, this month, or at some point, that a market is going to be available, and how long there is going to be a market because it is going to take some money to tool up and start producing this equipment, and you have got to be able to provide for funding that purchase on a long-term basis.

So the general fund, while it sounds good, presents some budgetary problems that I am trying specifically to deal with, and I just wanted to make that explanation.

Mr. LALLY. Yes, sir.

Mr. OBERSTAR. The gentleman from Oregon. Mr. DeFazio.

Mr. DEFAZIO. Thank you, Mr. Chairman. Just also back to the previous line of questioning, Mr. Lally, on the commuter airlines.

My examination of the statutes—I agree the FAA has the authority to extend; it is only by administrative rule that they have not extended to the smaller-capacity planes. But I was not quite certain whether or not you were taking a position on that, or whether the ATA has taken a position on that extension.

And let me state my concern here, and then see if you can address that. As you noted, and I think very suitably, the threat has changed. In your testimony you talk about that, and I think in fact that the FAA, and other Federal agencies, are just beginning to perceive that.

That it is no longer—I cannot remember his name, the guy who hijacked the plane in the Northwest and jumped out somewhere, and they keep finding things that they think are parts of him. That is not what we are looking at anymore, is the lone hijacker, but actually just terrorist actions—in fact people who will die, who will be willing to go down with the plane. I mean, carry on a briefcase, put it under their seat, and take themselves and the plane with them.

Given that, I think we have a very real threat with the commuter airlines, and I tell you, one threat I perceive—if you are talking about actions against governments, as you talk about in your testimony—there could be no more effective action against the Government and nothing more disruptive to our society, or economy, than someone taking a commuter plane down into a nuclear plant, for instance.

So my feeling is very strong that it should be extended to anything commercial. I mean, that is not going to prevent them from getting a private plane, but, you know, we take care of these problems as we can.

Has the ATA taken a position? Do you have one, or——

Mr. LALLY. No, sir. The ATA has not taken a position on this, and, the view I expressed earlier, and would express now, is a personal view that the existing Federal Aviation regulation part 108, I think gives FAA a trigger to pull if they care to pull it to extend the requirements.

Mr. DEFAZIO. Bad image.

Mr. LALLY. Yes; yes.

Mr. DEFAZIO. Bad image, but—okay. I would like to go back to my earlier line of questioning regarding the technology that is out there.

One thing I see in the bill is basically we assume that we have got it here with the TNA, and we should move ahead with installation in those high-threat foreign airports. I wonder if we just took 60 days, had the FAA administrator, Department of State, FBI, DOE, DOD—whoever else is involved in explosives detection technology development—you know—get together, name a panel, conduct impartial tests, and just see if there is anything else out there before we go ahead with the TNA.

Do you think that would be a reasonable step to take?

Mr. LALLY. Again, speaking personally, the FAA was given the lead agency responsibility in the Executive Branch for the development of explosives detection techniques in 1976, and I think FAA, over those years, has always had an outreach effort underway to consult with other agencies of Government, and other governments, to make sure that they were aware of technological advances, and to take advantage of the best talents in this field.

My own view is that I believe FAA has done that, the same thing, over the years. Taking another 30 days to revalidate that, might not be a bad idea. I cannot say it would not be bad. I just do not know that it is in fact necessary.

Mr. DEFAZIO. Thank you. No further questions, Mr. Chairman.

Mr. **Oberstar**. Mr. Lally, are you, speaking on behalf of ATA, willing to have interim use of vapor detection devices to be mandatory? Required by law?

Mr. **Lally**. Yes, sir. I believe that if there is a regulatory requirement for TNA, that that same requirement ought to be expanded to permit the FAA administrator to require, by the same regulation the vapor detection techniques.

The airlines have placed great reliance on FAA in the development of these techniques, and the airlines, I believe, would not want to undertake the use of these techniques unless they were in fact approved by FAA as suitable for meeting their security requirements.

Mr. **Oberstar**. There was another point in your testimony on the last page, referring to the petition that ATA and airport operators, and others, submitted to Secretary Skinner to postpone implementation of the rule on airport access control devices.

Well, what do you intend to accomplish in the interim? What would this delay achieve? What do you want to test out?

Mr. **Lally**. Yes. I do not think it is a delay, sir. I think it is just a more intelligent approach. There was a lot of discussion earlier about, is there a need for compatibility or is there not?

Mr. **Oberstar**. Yes.

Mr. **Lally**. And that issue is unanswered. And should the approach be bar code, or mag stripe, or what should it be? Is there sufficient private contractor talent to meet the schedule that is set to cover 269 airports?

The industry, as a whole, was united on this point. That a better approach would be to undertake it on a slower, more studied basis, to gain experience before proceeding to all 269 airports. So it is not a delay, I do not think.

The idea was that every airport could get up to speed as fast as they can, to certain milestones, but then there would be—based upon the education and the findings, and the experience developed during the pilot project, guidance for the industry to proceed to completion.

Mr. **Oberstar**. Well, it certainly is a major issue here that needs to be resolved, as I explored with Ms. Freeman in my questioning, and her response, and she indicated that FAA is very close to completing some formulation that may be useful here, but I think this is a matter that we may have to address in the legislation.

If there are no further questions—the gentleman from Pennsylvania.

Mr. **Clinger**. Just one question, Mr. Lally. You had indicated that the vapor detection would be in addition to TNA, that you would perhaps have a need for both the vapor detection as well as the TNA.

Since the bill would have a price tag of about $100 million—this would presumably increase funding to cover that as well? Or would you contemplate that those would be financed in some other way?

Mr. **Lally**. No. It would probably be an increased funding requirement. The preliminary ATA estimate, looking at just the 45 airports—and I think we made this available to the committee at the earlier hearing—our estimate called for a total expenditure of $66.6 million to equip the 45 airports overseas with a minimum requirement of TNA units, plus vapor detector units. So in our estimate we included both, but we did not include anything for the domestic scene.

Mr. CLINGER. Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Lally. We greatly appreciate your testimony, and we will certainly be coming back to you again for further comments as we proceed with this legislation.

Our final witness is Mr. Robert Wigington. I am sorry. This is a substitution here. But first, Mr. Barclay, Executive Vice President of the American Association of Airport Executives, and then Mr. Robert Wigington, Vice President, Governmental Affairs, for the Airport Operators Council International. The Chair would like to note for the record that Mr. Jeff Hamiel, Executive Director, Minneapolis-St. Paul Metropolitan Airport Commission was to have testified, but he had a previous commitment in Minnesota with the State legislature, and that may be a much more exhausting experience than testifying here, since there are some very lively issues that the State legislature is en- gaged in right now.

We welcome you gentlemen, and greatly appreciate your participation. The testimony, of course, that was submitted at our March hearing on behalf of your organizations, and now the testimony that you are going to present today. The overseas with a minimum requirement of TNA units, plus vapor detector units. So in our estimate we included both, but we did not include anything on the domestic scene.

Mr. CLINGER. Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Lally. We greatly appreciate your testimony, and we will certainly be coming back to you again for further comments as we proceed with this legislation.

[Mr. Lally's prepared statement follows:]

# STATEMENT OF RICHARD F. LALLY

ON BEHALF OF:

AIR TRANSPORT ASSOCIATION OF AMERICA
1709 NEW YORK AVENUE, N.W.
WASHINGTON, D.C.

CONCERNING AVIATION SECURITY

BEFORE THE SUBCOMMITTEE ON AVIATION OF THE

HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

U.S. HOUSE OF REPRESENTATIVES

APRIL 25, 1989

## AVIATION SECURITY

ON BEHALF OF THE AIR TRANSPORT ASSOCIATION WHICH REPRESENTS THE MAJOR UNITED STATES SCHEDULED AIRLINES, I AM PLEASED TO AGAIN DISCUSS WITH THE SUBCOMMITTEE THE IMPORTANT TOPIC OF AVIATION SECURITY, ESPECIALLY THE LEGISLATION INTRODUCED BY THE CHAIRMAN TO REQUIRE INSTALLATION AND USE OF EXPLOSIVE DETECTION EQUIPMENT.

THE AIRLINES SUPPORT THE OBJECTIVES OF H.R. 1659, THE "AVIATION SECURITY ACT OF 1989", BUT WE DO HAVE SOME RECOMMENDATIONS THAT WE THINK COULD CONTRIBUTE TO ADDITIONAL IMPROVEMENTS IN AVIATION SECURITY. IN THE COURSE OF DISCUSSING THE SPECIFICS OF THAT LEGISLATIVE PROPOSAL, HOWEVER, I WOULD LIKE TO MAKE SOME GENERAL OBSERVATIONS WITH RESPECT TO THE TERRORIST THREAT FACING INTERNATIONAL CIVIL AVIATION TODAY.

THE FIRST POINT I WOULD LIKE TO MAKE IS THAT TRAVEL ON U.S. FLAG CARRIERS IS SAFE -- AND SECURE. THE U.S. AIRLINES WITH SERVICE OVERSEAS HAVE HAD EXTRAORDINARY SECURITY MEASURES IN EFFECT FOR THE PAST THREE YEARS AT 45 HIGH RISK AIRPORTS, MOST OF WHICH ARE LOCATED IN EUROPE AND THE MIDDLE EAST.

FOLLOWING THE BOMBING OF PAN AM FLIGHT 103, DECEMBER 21, 1988, THOSE EXTRAORDINARY MEASURES WERE MADE EVEN MORE STRINGENT. TODAY, THE SECURITY PROVIDED BY U.S. FLAG CARRIERS IS AS GOOD AS THAT PROVIDED BY ANY FOREIGN AIRLINE, WITHOUT EXCEPTION, AND IN MOST CASES IS FAR BETTER.

HOWEVER, THE MORE STRINGENT SECURITY MANDATED BY FAA DECEMBER 29, 1988 FOR U.S. AIRLINES WAS NOT REQUIRED OF FOREIGN AIR CARRIERS SERVING THE U.S. FROM THE SAME HIGH-THREAT FOREIGN AIRPORTS, DESPITE THE FACT THAT SOME 50% OF U.S. CITIZENS WHO TRAVEL ABROAD FLY ON FOREIGN AIR CARRIERS. THE FACT THAT FOREIGN CARRIERS DO NOT OPERATE UNDER THE SAME SECURITY RULES IS, I THINK, AN OBVIOUS FLAW IN FAA'S CURRENT SECURITY PROGRAM. WE BELIEVE IT IS IMPERATIVE THAT FAA BE REQUIRED TO IMPOSE THE SAME HEIGHTENED SECURITY MEASURES ON FOREIGN CARRIERS SERVING THE U.S. THAT THEY IMPOSED ON U.S. CARRIERS IN THE WAKE OF THE PAN AM CRASH.

MY SECOND POINT IS THAT THE NATURE OF THE SECURITY THREAT WE FACE IS FAR DIFFERENT (AND FAR MORE DANGEROUS) FROM WHAT IT WAS IN THE EARLY SEVENTIES WHEN WE FIRST BEGAN SCREENING PASSENGERS AND THEIR CARRY-ON BAGGAGE. BACK THEN, HIJACKING WAS THE PRIMARY THREAT. NOW, IT IS SABOTAGE BY INTERNATIONAL TERRORISTS SEEKING TO INFLUENCE THE BEHAVIOR OF GOVERNMENTS THROUGH ACTS OF VIOLENCE AGAINST COMMERCIAL AVIATION. MODIFICATION OF GOVERNMENT POLICY IS THEIR REAL GOAL, COMMERCIAL AVIATION MERELY THE SURROGATE TARGET. THE ATTACK ON PA-103 WAS NOT AIMED AT ANY OF THE PASSENGERS OR CREW, OR AT THE AIRLINE ITSELF. CLEARLY THE TERRORISTS' TARGET WAS THE U.S. GOVERNMENT.

MEETING THIS NEW THREAT REQUIRES GREATER GOVERNMENT INVOLVEMENT IN AIRLINE SECURITY. THE U.S. GOVERNMENT MUST GO BEYOND ITS TRADITIONAL REGULATORY ROLE AND BECOME A DIRECT PARTICIPANT AND AN ACTIVE PARTNER OF THE AIRLINES IN SECURITY. WHAT IS NEEDED IS CONTINUING AND DIRECT ASSISTANCE OF A HANDS-ON NATURE TO NOT ONLY HELP THE AIRLINES, BUT TO PROVIDE CONSTANT INTERACTION WITH FOREIGN AIRPORT AUTHORITIES TO ASSURE TOTAL SECURITY SUPPORT FOR U.S. AIRLINE OPERATIONS.

WE BELIEVE THAT THE FAA SHOULD CONCENTRATE ITS OWN SECURITY RESOURCES WHERE THEY ARE NEEDED MOST. WITH CURRENTLY PROPOSED BUDGET INCREASES -- WHICH WE SUPPORT -- FAA'S SECURITY WORK FORCE WILL BE CLOSE TO THE 700 LEVEL. WE WERE PLEASED WITH SECRETARY SKINNER'S ANNOUNCEMENT APRIL 3rd THAT ADDITIONAL FAA SECURITY SPECIALISTS WILL BE REDEPLOYED TO SELECTED U.S. AND OVERSEAS AIRPORTS. THESE MOVES MUST BE IN SUFFICIENT NUMBERS AND IMMEDIATE, WITH THE CLEAR UNDERSTANDING THAT THE EXPERTS ARE TO WORK WITH FOREIGN GOVERNMENTS AND PROVIDE CONTINUING ASSISTANCE TO U.S. AIRLINES TO ASSURE THE ADEQUACY OF U.S. AIRLINE SECURITY PROGRAMS. THE FAA SECURITY SPECIALISTS SHOULD BE ASSIGNED TO AIRPORTS WHERE THE THREAT OF TERRORISM IS GREATEST -- SPECIFICALLY TO EUROPE, THE MIDDLE EAST AND THE FAR EAST. ALTHOUGH TODAY'S TERRORISM THREAT IS CONCENTRATED IN THOSE AREAS, VERY FEW OF FAA'S SECURITY EXPERTS ARE ASSIGNED TO THOSE LOCATIONS.

I AM NOT SUGGESTING THAT THE FAA ABANDON ITS SECURITY RESPONSIBILITIES AT DOMESTIC AIRPORTS BUT I AM SUGGESTING THAT IT MUST ASSIGN MORE OF ITS SECURITY PEOPLE TO GROUND DUTIES IN SUPPORT OF AIRLINE SECURITY ACTIVITIES AT HIGH RISK AIRPORTS OVERSEAS.

NEXT, WE HAVE RECOMMENDED THAT THE GOVERNMENT SPEED THE DEVELOPMENT AND AVAILABILITY OF EMERGING NEW TECHNOLOGIES THAT DETECT HIDDEN EXPLOSIVES. FAA HAS HAD PROMISING RESULTS IN RECENT TESTS OF EQUIPMENT DESIGNED TO DETECT VAPORS EMITTED BY EXPLOSIVES. IT ALSO HAS ACHIEVED SIGNIFICANT BREAKTHROUGHS IN THE DEVELOPMENT OF THERMAL NEUTRON ANALYSIS, A TECHNIQUE CAPABLE OF DETECTING ALL KNOWN EXPLOSIVES IN THE QUANTITIES NECESSARY TO BRING DOWN A COMMERCIAL AIRCRAFT.

FAA ANNOUNCED IT WILL BUY SIX THERMAL NEUTRON MACHINES THIS YEAR AND WILL DO ALL THAT IT CAN TO BRING THIS NEW TECHNOLOGY ON LINE QUICKLY. SECRETARY SKINNER'S APRIL 3 ANNOUNCEMENT ADVISED THAT AIRLINES WILL BE REQUIRED TO INSTALL AS MANY AS 100 EXPLOSIVE DETECTION SYSTEMS SUCH AS TNA UNITS AT MAJOR U.S. AND FOREIGN AIRPORTS AS SOON AS THEY ARE AVAILABLE. THESE ARE THE FIRST APPROVED EXPLOSIVE DETECTION TECHNIQUES TO EMERGE FROM A 15 YEAR FAA RESEARCH AND DEVELOPMENT PROGRAM. THEY ARE GOOD FIRST STEPS. WE BELIEVE THAT THE EQUIPMENT SHOULD BE INSTALLED ON A PRIORITY BASIS AT HIGH THREAT FOREIGN AIRPORTS WHERE THE THREAT IS GREATEST.

IN THIS RESPECT, H.R. 1659 WOULD PROVIDE THAT THE FAA ADMINISTRATOR REQUIRE ALL AIR CARRIERS TO INSTALL AND USE, AS EXPEDITIOUSLY AS POSSIBLE, EXPLOSIVE DETECTION EQUIPMENT WHICH MEETS MINIMUM PERFORMANCE STANDARDS REQUIRING APPLICATION OF TECHNOLOGY EQUIVALENT TO OR BETTER THAN THERMAL NEUTRON ANALYSIS TECHNOLOGY AT CERTAIN HIGH-THREAT FOREIGN AIRPORTS, AND AT SUCH OTHER FOREIGN OR U.S. AIRPORTS AS THE ADMINISTRATOR DETERMINES THAT THE INSTALLATION AND USE OF SUCH EQUIPMENT IS NECESSARY TO ENSURE THE SAFETY OF AIR CARRIER PASSENGERS.

WE SUPPORT THE INSTALLATION AND USE OF EXPLOSIVE DETECTION EQUIPMENT AT THE 45 AIRPORTS IN EUROPE, THE MIDDLE EAST AND THE FAR EAST WHERE U.S. AIRLINES ARE REQUIRED TO USE EXTRAORDINARY SECURITY MEASURES. HOWEVER, BECAUSE THE THREAT IS SO SEVERE AND THE NEED IS SO URGENT, WE BELIEVE THAT THE ADMINISTRATOR SHOULD BE AUTHORIZED TO APPROVE INTERIM USE OF OTHER TECHNOLOGIES SUCH AS VAPOR DETECTION, THAT DO NOT TODAY MEET THE HIGH STANDARDS ACHIEVED BY TNA, BUT STILL ARE CAPABLE OF DETECTING EXPLOSIVES. PROPER USE OF THIS EQUIPMENT WOULD ALSO CONSTITUTE A STRONG VISIBLE DETERRENT.

WE ALSO ENDORSE THE LIMITATION INCLUDED IN H.R. 1659 THAT INSTALLATION AND USE OF EXPLOSIVE DETECTION EQUIPMENT IS NOT NOW REQUIRED AT U.S. AIRPORTS. WE BELIEVE THE FOCUS OF THE TERRORIST THREAT FACING U.S. AIRLINES IS AT THE 45 HIGH RISK AIRPORTS IN EUROPE, THE MID EAST AND THE FAR EAST. FORTUNATELY, THE SAME THREAT DOES NOT EXIST AT DOMESTIC AIRPORTS AND THERE IS NO NEED FOR INSTALLATION OF SUCH EQUIPMENT IN THE U.S. AT THIS TIME.

ATA'S PRELIMINARY ESTIMATE -- PREVIOUSLY PROVIDED THE SUBCOMMITTEE -- IS THAT 66 THERMAL NEUTRON ANALYSIS UNITS AND 171 VAPOR DETECTION UNITS ARE NEEDED TO MEET THE SECURITY REQUIREMENTS OF EIGHT U.S. AIRLINES AT 45 HIGH THREAT AIRPORTS IN EUROPE, THE MIDDLE EAST AND THE FAR EAST. COSTS ARE ESTIMATED AT $49,500,000 FOR THE THERMAL NEUTRON ANALYSIS UNITS AND $17,100,000 FOR THE VAPOR DETECTION UNITS, FOR A TOTAL PRELIMINARY COST ESTIMATE OF $66,600,000.

WE BELIEVE THAT FEDERAL FUNDING FOR THIS EQUIPMENT IS JUSTIFIED AND WARRANTED. IT IS CONSISTENT WITH THE GOVERNMENT'S OBLIGATION TO MAINTAIN PUBLIC SAFETY AND PROTECT ITS CITIZENS FROM CRIMINAL ATTACKS, ESPECIALLY WHEN THOSE ATTACKS ARE COMMITTED BY INTERNATIONAL TERRORISTS WHOSE REAL TARGETS ARE U.S. GOVERNMENT INSTITUTIONS AND POLICIES. FAA FUNDED THE DEPLOYMENT OF METAL DETECTORS AT U.S. AIRPORTS IN 1973 TO MEET THE HIJACKING THREAT. CERTAINLY, FEDERAL FUNDING IS EVEN MORE APPROPRIATE AND MORE URGENTLY NEEDED NOW TO COMBAT TERRORISM.

THE U.S. GOVERNMENT FOUND IT NECESSARY AND APPROPRIATE TO PROVIDE PROTECTION FOR THE OIL SHIPMENTS OF PRIVATE SECTOR MARITIME OPERATIONS IN THE PERSIAN GULF. IT WOULD APPEAR EVEN MORE NECESSARY AND APPROPRIATE THAT THE GOVERNMENT PROVIDE SECURITY ASSISTANCE AND FUNDING TO PROTECT THE PASSENGER OPERATIONS OF U.S. AIRLINES IN THE SAME PART OF THE WORLD.

IN THIS REGARD, WHILE WE SUPPORT THE AUTHORIZATION IN H.R. 1659 FOR THE ADMINISTRATOR TO MAKE GRANTS FROM THE TRUST FUND TO PAY FOR THE EXPLOSIVE DETECTION EQUIPMENT THAT MAY BE REQUIRED, WE BELIEVE THAT BECAUSE OF THE NATURE OF THE THREAT AND THE NEED FOR FEDERAL ASSISTANCE AND INVOLVEMENT, FUNDING FROM GENERAL REVENUES MAY BE MORE APPROPRIATE.

## AIRPORT ACCESS DOORS

H.R. 1659 WOULD ALSO AUTHORIZE THE ADMINISTRATOR TO MAKE GRANTS FROM THE TRUST FUND TO SPONSORS OF AIRPORTS TO PAY FOR THE COST OF ACQUIRING AND INSTALLING EQUIPMENT USED TO COMPLY WITH FAA REGULATIONS FOR CONTROLLING ACCESS TO SECURED AREAS OF AIRPORTS. UP TO $170,000,000 WOULD BE AUTHORIZED FOR THIS PURPOSE. WE SUPPORT THE OBJECTIVE OF IMPROVING ACCESS CONTROL SYSTEMS AT MAJOR U.S. AIRPORTS; HOWEVER, WE SHARE THE CONCERN EXPRESSED BY THE TOTAL U.S. CIVIL AVIATION COMMUNITY THAT THE FAA RULE WILL BE IMPLEMENTED IN AN UNSATISFACTORY MANNER BECAUSE OF ITS COMPLEXITY AND SHORT IMPLEMENTATION SCHEDULE.

FOR THAT REASON ATA JOINED THE AIRPORT OPERATORS AND OTHER INDUSTRY GROUPS IN PETITIONING SECRETARY SKINNER MARCH 15, 1989 TO POSTPONE IMPLEMENTATION OF THE RULE SO THAT INTERESTED AVIATION GROUPS CAN MEET WITH THE FAA TO FORMULATE A PLAN THAT WILL RESULT IN THE INTRODUCTION OF NEW AIRPORT ACCESS CONTROL MEASURES IN THE MOST EFFECTUAL MANNER. WE ARE HOPEFUL THAT SECRETARY SKINNER WILL RESPOND FAVORABLY TO THAT REQUEST.

MOREOVER, AS NOTED EARLIER, WE BELIEVE THAT INTERNATIONAL TERRORISM POSES THE MORE SEVERE THREAT TO CIVIL AVIATION AND THAT THAT THREAT IS FOCUSED AT THE 45 HIGH RISK AIRPORTS IN EUROPE, THE MIDDLE EAST AND FAR EAST. WE DO NOT MEAN TO MINIMIZE THE SECURITY REQUIREMENTS OF U.S. AIRPORTS, BUT WE BELIEVE THAT IN THIS PERIOD OF FISCAL AUSTERITY SCARCE RESOURCES WOULD BE BETTER SPENT IN RESPONDING TO THE PRIMARY THREAT AND UNDERTAKING THE MORE STUDIED APPROACH TO ACCESS CONTROL SYSTEMS RECOMMENDED TO THE SECRETARY.

AGAIN, MR. CHAIRMAN, WE APPRECIATE THE OPPORTUNITY TO PRESENT OUR VIEWS ON H.R. 1659 AND ON THE GENERAL TOPIC OF AVIATION SECURITY. WE APPLAUD THE INITIATIVE OF THE SUBCOMMITTEE IN THIS IMPORTANT SUBJECT AND WE THANK YOU FOR YOUR ATTENTION.

Mr. OBERSTAR. Next, we will hear from a panel, Mr. Charles Barclay, Executive Vice President of the American Association of Airport Executives, and then Mr. Robert Wigington, Vice President, Governmental Affairs, for the Airport Operators Council International. The Chair would like to note for the record that Mr. Jeff Hamiel, Executive Director, Minneapolis-St. Paul Metropolitan Airport Commission was to have testified, but he had a previous commitment in Minnesota with the State legislature, and that may be a much more exhausting experience than testifying here, since there are some very lively issues that the State legislature is engaged in right now.

We welcome you gentleman, and greatly apreciate your participation. The complete statement of the AAAE will be included in the record, and you may summarize, as you choose. I have already read it. It is a fine statement. It raises some very important questions.

## TESTIMONY OF A PANEL CONSISTING OF CHARLES M. BARCLAY, EXECUTIVE VICE PRESIDENT, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES, AND ROBERT WIGINGTON, VICE PRESIDENT, GOVERNMENTAL AFFAIRS, AIRPORT OPERATORS COUNCIL INTERNATIONAL

Mr. BARCLAY. Thank you, Mr. Chairman. I would like to just summarize our statement, and we appreciate it being put in the record.

The bottom line, Mr. Chairman, is that airport executives support the Aviation Security Act of 1989. We applaud the purpose and the intent of the legislation, and we appreciate the recognition that you have made for the airport needs, and the need for dedicated funding for the new security access rule.

I do have to mention, Mr. Chairman, that we have a future concern about the necessity of separate funding for these items. It is very important that we cannot pretend, that if we trade off safety and capacity needs for new security items, and we live under the current budget ceilings, that we have somehow improved the system with that slight of hand.

We just have made our problems compete with each other more vigorously. There is currently over at FAA over $7 billion in requests for capacity, safety, security, noise kinds of items that are needed by the system. These are for grant items such as firefighting and rescue vehicles, some for security systems, some very large capacity items that we all know about, that are affecting the system greatly. We cannot trade off those needs for security systems because today, security is on the front page, and safety and capacity are now in the back page of the current news.

So our key point, Mr. Chairman, is that we do need separate, distinct new funding, over and above current ceiling levels. We would ask the committee, that if it becomes apparent in the future, that we are just not going to be able to get ceilings raised from current budget levels, that Congress come back and reexamine the issue, or the possibility of a security surcharge to be mandated on all tickets, to pay for the needs of both airlines and airports for these new security items.

That is something that was used in the early 1970's by Government, and we would ask that it be revisited, again only in the instance that we find the political realities of the budget process will not permit for these needed items to be funded through the trust fund.

On the security access rule, I want to say that AAAE supports the intent of this legislation, but this is a seriously flawed regulation. It was put out with such haste at the end of the last Administration of DOT, where there was a mood of get something out, rather than get out something that is substantively sound, that we have had trouble sitting down and explaining all our problems with this regulation.

But perimeter security of airports is a real problem that does not need a fast, wrong solution to it, and we fear that is what we have got in the current regulation.

Let me just go over three examples of the problems with this rule that the Chairman has already touched on in his examination of the Government witnesses.

One is compatibility, and as has been pointed out, when you have crews that may be making stops at eight airports, that could potentially have eight different access cards/PIC number systems, and then you add into the system the operational problems of going to alternative airports due to weather, of crew changes, you wind up with a vision of a system, that it is unworkable.

The rule does not even address compatibility, and, worse yet, it does not provide the amount of time necessary for the industry to get together and try itself to work out compatibility. So we think that is one example of a serious flaw. A second is that there is no advisory circular yet published on this rule. The rule itself is very vague. We need a lot of specifics at airports in order to implement the rule, but we do not yet have out the advisory circular providing that detail, yet we are continually told that the deadline of August 8th will be held to for airport security plans.

Now, the regulators, perhaps understandably from their point of view, seem to have much more sympathy for their own bureaucratic process and their difficulty in meeting deadlines than they have for the same kind of problems we have, as those people being regulated, and we now are in a position of not knowing what is wanted in the plan due August 8th, but being told you will have the plan in August 8th anyway.

The third and most important example from airports' point of view is the issue of tenant liability. We were surprised when this rule finally came out, and it had expanded from the issue of immediate terminal area access controls to cover the entire airport and all its tenants, and made the airport responsible for security of all tenants.

We were surprised to find out that we were responsible for the security of National Guard bases that have access to the aircraft operations area.

We were surprised to find out that we were to be held accountable for security breaches at top-secret defense installations where the airport operator does not even know what is going on, and is not allowed to know who works there.

We were surprised to find out that we were responsible for FBO operations, and access to them three miles from the terminal area, when it has to handle air ambulance operations at all hours of the day and night.

The best analogy I can give the committee to try to communicate the spot we find ourselves in under this FAA rule would be if Congress, and the individual members of Congress, were held liable for security breaches at the White House.

The next time someone hops over the fence down at the White House, the police come and see the members of Congress and levy the fine on you, with the explanation that, well, this is okay, you can go ahead and pass that fine on to the White House the next time you pass a piece of legislation on them.

Well, the trouble with that notion is, first of all, the police have pointed their finger at you, and everyone has publicly seen that. And secondly, from a security point of view, not putting the accountability on the people with control of the area, be it at the White House, or be it at a defense installation, or be it at an FBO—from a security point of view you want the people with control to also be held accountable for security breaches.

You do not want them to know you are going to hold somebody else accountable if they permit a security breach.

So this notion of holding airport operators responsible for areas under the control of others is both bad security policy and it is bad public policy, from an equity point of view.

Mr. Chairman, I would like to say thank you to the professional staff. They have spent a good deal of time with us both on our questions about the funding issues, and on some of these issues on the access rule, and we very much appreciate their efforts. Thank you.

Mr. OBERSTAR. Thank you for your testimony, and for participating in each step of the way of this long process on security. We of course value, greatly, the advice of those of you who are on the operating end of the airport security business.

The uniform access issue is one that gives me a great deal of trouble. What we have provided in the bill is a funding mechanism to pay the cost of what is going to be a very expensive process.

In the March hearing, my recollection is that the airport operators had a figure of $18,000 per door. Have you further refined that figure since then? Or does that number stand?

Mr. BARCLAY. That number stands for the system that is being envisioned by most of the airport operators. We have tried, but we still cannot figure out the numbers being used by the Adminstration in their analysis of the rule, which is one-tenth of what the experts at the airports are saying they need.

You add to that some of the issues of—at San Antonio you have a Fairchild plant with all the employees that have to get in and out, and could theoretically have access to the AOA, and it multiplies the numbers even higher than the ones we had. So that is the best information we have got.

Mr. OBERSTAR. Is it possible to reduce the number of access doors by simply sealing them off, not having so many points of access to airport operation areas, is a question I asked the DOT-FAA panel. My recollection from the March hearing is that at JFK there are

1500 access doors that the airport authority testified to, and that FAA had a smaller number, considerably smaller number of access doors that it thought would be subject to computerized control.

Perhaps between the FAA numbers and the actual numbers that the airport operators decide, maybe some of those doors that are superfluous for airport operations, some of those should just simply be sealed off and not used, and that is obviously a very theoretical question.

But I know from moving about airports, that there seems to be an awful lot of doors going some place that—you know—you just wonder what for.

Mr. **Barclay**. Well, I honestly think, Mr. Chairman, that airports have, for other reasons, already made examinations of doors and access points, and one of our problems in dealing with the regulators on this issue seems to be a lack of understanding of the complexities out there for airports.

There are many access points where you are not just trying to get a few people through; you are getting whole shifts of worker banks through at peak hours. Even an airport as small as Billings has plants on the airport, where they are being told to put a security access gate that would have to let each individual through, and they are talking about, you know, hundreds of individuals at peak hours.

The complexities of coming up with an access system are large, and there has not been the amount of time necessary for the FAA and DOT, and the airports, to sit down with the airlines and work on a logical implementation of a plan that can cover all these anomalies. That is our problem.

The deadline was rushed through. Other people had been simultaneously working on solutions at lower levels, and thought they were heading toward a good plan, and that was short-cut by the rule from above.

Mr. **Oberstar**. All right. At that point I would like to pass over now to Mr. Wigington, and get the Airport Operators Council's viewpoint on these matters, and please proceed with your testimony.

Mr. **Wigington**. Thank you, Mr. Chairman. Jeff Hamiel does regret—he had to leave to deal with a little takeover issue in the State senate. I do not think it was taking over the State senate, and I regret, too, that he is not here to present his testimony, but I will be brief and we appreciate the opportunity to discuss your bill.

As the government bodies responsible for the safe and efficient operation of our Nation's and the world's airports, AOCI is, of course, committed to enhancing the security of airports, air carriers, and most importantly, air travelers.

We commend you on your quick response to the security situation, and the terrorist threat that we all see, and we think your bill is an important first step, particularly important in trying to provide funding for access control systems and explosives detection.

We would like to offer a few suggestions to your bill, and try to help you in fashioning a very effective piece of legislation.

We strongly support authorizing grants from the trust fund in a separate security assistance program for airport access control. That was certainly one of the shortcomings in the FAA's rule, not recommending or providing any additional money, and of course that leaves airports in the situation of trying to balance the need for funding security projects, particularly the access control system, with other security projects, and other capacity and safety projects.

One concern, however, is that the amount that would be authorized, the $170 million, is based on the FAA's cost estimate which, as we and others have testified, is flawed; we think the costs will be substantially more than that.

So our one concern is that the money would not go far enough, if it were provided by the Appropriations Committees, and certainly, the FAA's own estimates were based on some faulty assumptions on how many access points an average airport would have.

Secondly, we of course have the concerns about the budget and appropriations process, and how we will actually get the money appropriated without taking away from AIP or other important FAA programs. We would certainly hope to work with this committee to make sure those monies are fully appropriated.

We would like to suggest a couple alternatives that, in addition to the Airport Security Assistance Grant Program, could provide additional money and flexible means for airport operators to try to deal with their security requirements and needs.

One is the airport revolving loan fund that we have suggested, which would tap a portion of the uncommitted trust fund surplus to provide loans to airports, that could be used for security and other important improvements, where AIP is currently inadequate.

If those loans were then repaid into an off-budget revolving loan fund, the funds would be recycled and provide additional loans and a long-term source of capital for airport projects.

Another option which AOCI and AAAE agree is need for the long-term future of aviation funding, a passenger charge; this would of course give the airports their own ability to put in a charge, where it is needed, for security or other types of capital improvement and capacity programs.

Particularly given the need for enhanced security and the need to find ways to pay for access control systems, this would seem to be an important opportunity to give airports flexibility and a new revenue source, to provide funding that the Appropriations Committees is unable to provide in AIP and the Administration has not proposed.

With respect to the airline security assistance program in your bill, we certainly support your efforts to accelerate the development and use of explosives detection equipment—TNA and vapor detection. We do have some concerns about using the Aviation Trust Fund money for this purpose.

We would agree with the statements of yourself, and many members of Congress, and ATA, that this is truly a national security issue. I think we heard that very clearly from the families of the victims of Pan Am 103. One of their biggest concerns was that there was not an appropriate Federal Government response to the attack that took place on Pan Am 103, and we would agree that there must be a role for the Federal Government in providing funding of these systems.

We would certainly echo the concerns of AAAE regarding tenant responsibility. The access control rule is putting a tremendous burden on the entire airport system for automated access control, and we think we desperately need some means of working out arrangements with the tenants to pass along responsibility for those tenants who do control their own facilities.

I will really cut it off there. I would be happy to answer any questions. I would like to emphasize, in our testimony, the need for a pilot program for access control. I think all of us in the industry agree that there are some serious problems with the FAA's rule. The airports are rushing to try to be in compliance. We are still waiting for the advisory circular. We do not know exactly what is going to be needed; how extensive these systems are going to be.

We do not even know what the FAA intends a "secure area" to be since that was not defined in the rule. I would like to refer back to the statement that the FAA witness said in regard to the Baltimore-Washington pilot program study in terms of enhancing aviation security and passenger screening, and they alluded to the benefits coming out of that pilot program.

We think the same kind of benefits could come out of a pilot program for access control. There is a lot that the FAA could learn, that we could all learn from that experience.

Airports could continue to move towards these access control systems. At least they would have the benefit of a pilot program, and particularly with respect to the need for compatibility. That is something we do not think we should close the door on, and we think there are some obvious benefits, that we should at least explore those and keep the opportunity there. Thank you, Mr. Chairman.

Mr. OBERSTAR. Thank you, Mr. Wigington. I just want to emphasize, again, that we certainly, on this subcommittee, and in the Public Works Committee, generally, do not want to simply rob Peter to pay Paul, take money out of one fund to serve another need of aviation, and that is why I wrote the legislation as contract authority to take the funding out of the trust fund without, in that way, reducing the already tight budget on other aspects of aviation.

We certainly are not even spending funds in the Federal Government to the authorized numbers for a wide range of aviation activities.

Now, specifically to the matter of the pilot program you have discussed, can you do a pilot program and still meet the compliance date of the FAA rule?

Mr. WIGINGTON. For some airports it may be too late; for those who have already gone very far down the road in trying to bid and award contracts. But even for those airports, we think there are some benefits that can be gained, and certainly for the other airports. For the largest airports, once you submit your plan in August and the FAA approves it, you have 18 months to get your system installed.

If we could get a pilot program up and running very quickly—and I think there are certainly a number of airports that are very far along in trying to develop the access control systems, and have much of the system in place—if we could target those airports you could get this program going very quickly, and certainly, those airports, as they proceed to implementation, could benefit, and certainly the airports that have later deadlines would clearly benefit before they are too far down the road.

We certainly would like to emphasize that we think the schedules are unrealistic but we are compelled to live with them, but certainly, a pilot program could be done, and would have benefit, even with the existing schedules.

Mr. OBERSTAR. You are envisioning sticking with the deadline, not stretching that deadline out?

Mr. WIGINGTON. Well, we certainly think the deadline should be adjusted, but what we would find acceptable would be at least a pilot program that FAA must undertake, and then the FAA reporting back to the Congress on some of the preliminary results, and, if possible, require the FAA to make some judgment as to whether there should be any change in the deadlines.

But at least we would all know better whether these deadlines can actually be met, and whether systems that are available are the best-available technology before we have gone the final step in installing them.

Mr. OBERSTAR. Earlier, I asked a question about the liability issue. What would be your reaction to a provision in law that the airport would not be subject to strict liability, if the airport authority enters into an agreement with fixed-based operators, that the airport would collect damages from that FBO, should it violate security regulations?

Mr. WIGINGTON. We would be very much in support of that type of a provision. We think that is a key element that needs to be changed in the FAA regulations.

Mr. OBERSTAR. Now in policing this, or any such language, how would the FAA ensure that the airport is being tough enough in its enforcement actions on security violations by FBOs?

Mr. WIGINGTON. Well, you would still have the FAA monitoring the airports in terms of their security program, and certainly to the extent that the airport operator has been negligent, they would still be held accountable.

So we think it would certainly enhance the awareness, and the level of priority, that all of the businesses and companies that function at an airport give to security, if they can be held directly accountable for their own actions or the actions of their employees.

Mr. BARCLAY. Mr. Chairman, if I could jump into this for a second. I think the way that provision is written is very important. If it is nothing but a shifting of the fine, the fine is still levied, in other words, on the airport operator, and shifted to the FBO, that that would continue to hold a problem for our members in—the finger is still pointed at them.

The airport executives agree, we do have a responsibility to require our tenants to have security plans, to, on a regular basis, check them and make sure they are operating those security plans properly

But if there is a breach, under their control, then FAA should visit that tenant directly with a fine.

Mr. OBERSTAR. All right. I may have some further questions. At this point, I want to yield to my colleague from Pennsylvania. Mr. Clinger.

Mr. Clinger. Thank you, Mr. Chairman. Mr. Barclay, you indicated that the association basically supports the TNA and the vapor detection devices. Should we go forward with both of those?

Mr. Barclay. We supported the legislation, Congressman. We thought that the Chairman's legislation made an important point, and our members are obviously much more expert in the airport access rules portion of it. But they thought it made an important point.

Mr. Clinger. Mr. Wigington, how do you feel with regard to the vapor detection technology?

Mr. Wigington. Well, we do not have the proper expertise to weigh one versus the other. From what we have understood from the FAA, they both have great potential and they should both be used, to the extent they can be made available.

Mr. Clinger. Okay. An amendment may be offered to the bill which would require FAA to issue a Notice of Proposed Rulemaking for the purpose of improving the effectiveness of security screening of passenger and carry-on baggage.

The rulemaking would include proposals to improve qualifications, training, and management of security screening personnel.

What would be your views on such a proposal, if that were to be an amendment to this legislation?

Mr. Barclay. Our board has not taken a position on that, has not had a chance to examine it. I would suspect that we, similar to ATA, would like to see that stay in the regulatory area. At some airports, the physical limitations for additional screening would need time to be worked out, and the issue of the qualifications of the screeners themselves is an issue—not with the airports of course, but with the—they are employees of the airline. So I am not sure we would have a position on that.

Mr. Clinger. You alluded in your testimony to a concern with the proposal made at the end of the last Administration, and what was your criticism of those proposals?

Mr. Barclay. This is the entire airport access rule. That there had been a committee of airports, airlines, Government people, working on a very deliberate plan to increase perimeter security as well as install access doors in terminal areas, and that was short-circuited in the closing months of last year by a very vigorous effort at the Department of Transportation, put quickly into place.

A comprehensive rule for all 269 airports that are serving major air carriers, and to have them put in access doors with—the initial notion is some kind of computer door that even for employees to get through those doors, they would have to have either a card or a PIC number, or both.

And when you start examining the problems of how many doors are on airports that have access out to the aircraft operations area, you come into huge complexities, and we agree that that kind of a program needs to go forward, but we have serious problems with the way this rule is written, and deals with some of the complexities for getting from A to B.

Mr. Clinger. We are talking about a significant expense, I would gather. If you are talking about some of computerized doors, and recognizing the number of doors you have, you are really talking big money.

Mr. **Barclay**. Congressman, our problem is, our estimate is close to $1 billion, and the Administration's estimate is just a little over $100 million, and we still cannot figure out why we have got a difference of opinion there.

Mr. **Clinger**. That regulation, or that directive is in effect now, though?

Mr. **Barclay**. It is an effective rule, and the first plans have to come from airports to FAA saying how we are going to implement our new security plan for access by August 8th, and that is what we were saying—we still do not have an advisory circular, with the detail that we need, before we can submit one of those plans.

Mr. **Clinger**. Thank you, Mr. Chairman.

Mr. **Oberstar**. One of the concerns expressed by airline professionals is on behalf of pilots, who feel that they are burdened by going through these metal detectors and screening devices. Is there some expedited means of providing screening for pilots, for flight attendants, perhaps for other personnel in that category?

Mr. **Barclay**. It is presently, as I understand it, an FAA regulation that they must go through screening, if they have to use the same access to the gate areas as the rest of the public.

Whether, at different airports, they have been able to come up with a different routing system to get them there, I do not know.

Mr. **Oberstar**. Mr. Wigington, do you have any comment on that?

Mr. **Wigington**. No, I do not have any information beyond that, as to what kind of special arrangements might be made to expedite that.

Mr. **Oberstar**. But the requirement for pilots and flight attendants to go through metal detectors is only if they are using the same access as passengers?

Mr. **Barclay**. It is my understanding—well, if you take a case of a Dulles, where they park at a different area, and then are taken out to the planes on buses—you know—they are not then going through a security screening device currently. That is, in part, what this security access rule is about. But it is understandable, the Airline Pilots' notion, that trying to protect against pilots hijacking airplanes seems a little superfluous.

Mr. **Oberstar**. Well, I remember a few years ago one of our colleagues in the Congress, when this whole metal detector system first came into being, objected mightily to a member of Congress having to be checked and go through this—why, this was absurd—as he stood there with his bags of hunting rifles. Eventually, the hunting rifles went separately, and so did he. [Laughter.]

Mr. **Oberstar**. So, I do not know. There is a problem and there may be other ways of dealing with that matter, and you have suggested something along that line.

We will endeavor to deal with the matter of liability in this legislation, I think it is a very important one, and I think if we can work out something that in some way limits the liability. I just do not think that it is reasonable to make airport operators responsible in the way that the FAA rule has proposed.

On the other hand, I think there is a partnership, and there is a rule, and there is a responsibility, that perhaps the approach of agreement with FBOs, that the airport will collect damages when the FBO violates a security regulation is the way to do it, and some oversight mechanism for FAA to see that airports are taking those steps vigorously is, again, within our concept of checks and balances and that may work.

If you have further thoughts about that, we would be glad to discuss the matter further.

Mr. BARCLAY. Thank you, Mr. Chairman, and if I could just throw in here, at the end: if you take a close look at the issue of the deadlines in this rule, our members are convinced they can sit down with the FAA and work out better security given the time—a better security system on this.

Mr. OBERSTAR. Thank you very much. We greatly appreciate your participation and your testimony.

[The prepared statements of Mr. Barclay and Mr. Hamiel follow:]

[redacted]

STATEMENT OF THE

AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES

BEFORE THE

SUBCOMMITTEE ON AVIATION
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES

APRIL 25, 1989

STATEMENT OF
THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES
PRESENTED BY
CHARLES M. BARCLAY
EXECUTIVE VICE PRESIDENT
BEFORE THE SUBCOMMITTEE ON AVIATION
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION
U.S. HOUSE OF REPRESENTATIVES
APRIL 25, 1989

GOOD MORNING, MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE. ON BEHALF OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES (AAAE), I WANT TO THANK YOU FOR THIS OPPORTUNITY TO COMMENT ON H.R.1659, "THE AVIATION SECURITY ACT OF 1989."

AAAE WAS FOUNDED IN 1928 TO REPRESENT AIRPORT MANAGEMENT THROUGHOUT THE UNITED STATES. TODAY, AAAE IS THE LARGEST PROFESSIONAL ORGANIZATION FOR AIRPORT EXECUTIVES IN THE WORLD, REPRESENTING OVER 1,500 AIRPORT MANAGEMENT PERSONNEL. OUR MEMBERSHIP IS TRULY REPRESENTATIVE OF AIRPORT MANAGEMENT AS IT IS NEITHER "BIG AIRPORT" NOR "SMALL AIRPORT" ORIENTED. AAAE HAS WITHIN ITS MEMBERSHIP THE EXECUTIVES OF LARGE AND MEDIUM SIZE AIRPORTS AS WELL AS HUNDREDS OF MANAGERS FROM THE SMALLER AIRPORTS -- USED EXCLUSIVELY BY GENERAL AVIATION OR REGIONAL AIRLINES.

MR. CHAIRMAN, AAAE WANTS TO THANK YOU AND THIS SUBCOMMITTEE FOR

THE STEPS YOU ARE TAKING TO UPGRADE AND MAINTAIN A STRONG AND EFFECTIVE SECURITY PROGRAM AT U.S. AND FOREIGN AIRPORTS. WE COMMEND YOU FOR THE INTRODUCTION OF H.R.1659, WHICH AUTHORIZES NEW FEDERAL ASSISTANCE FOR THE ACQUISITION AND INSTALLATION OF EXPLOSIVES DETECTION EQUIPMENT AND ACCESS CONTROL SYSTEMS.

WE BELIEVE THAT YOUR PROPOSED "AVIATION SECURITY ACT OF 1989" IS A TIMELY AND APPROPRIATE STEP FOR ADDRESSING THE SECURITY THREAT TO THE TRAVELING PUBLIC. CONCENTRATING RESOURCES ON THE INSTALLATION OF THERMAL NEUTRON EXPLOSIVES DETECTION DEVICES IS A WISE INVESTMENT IN MEETING THIS THREAT AND ONE THAT AAAE AGREES WITH. IN ADDITION, THE PROVISION OF FUNDING FOR THE INSTALLATION OF THE ACCESS CONTROL SYSTEMS RECENTLY REQUIRED BY THE FAA IS GRATEFULLY ACKNOWLEDGED, EVEN THOUGH WE CONTINUE TO QUESTION SOME ASPECTS OF THAT NEW RULE.

AS YOU KNOW, MR. CHAIRMAN, WE DO HAVE SOME CONCERNS ABOUT THE POLITICAL VIABILITY OF THAT PART OF YOUR PROPOSAL THAT PROVIDES THESE SECURITY ASSISTANCE FUNDS IN ADDITION TO FUNDS ALREADY EARMARKED FOR OTHER PROGRAMS FINANCED FROM THE TRUST FUND. WE ABSOLUTELY, AND WITHOUT RESERVATION, ENDORSE THIS APPROACH. BUT WE ARE FEARFUL THAT OTHERS IN CONGRESS WHO DO NOT SHARE YOUR FIRM COMMITMENT TO SPENDING TRUST FUND REVENUES MAY SEEK TO FUND THESE NEW SECURITY REQUIREMENTS FROM WITHIN CURRENT ALLOCATIONS FOR OTHER PROGRAMS.

THIS WOULD CLEARLY BE WRONG. THE FAA CURRENTLY HAS A BACKLOG OF

AIRPORT PROJECTS ELIGIBLE FOR FEDERAL FUNDING THAT EXCEEDS $7 BILLION. DESPITE THESE ENORMOUS NEEDS, THE BUSH ADMINISTRATION IS PROPOSING A CUT IN THE AIRPORT IMPROVEMENT PROGRAM FOR FY 1990 OF $350 MILLION BELOW THE AUTHORIZED LEVEL. IN LIGHT OF THIS, COMBINED WITH INADEQUATE AIP APPROPRIATIONS IN RECENT YEARS, WE ARE OPPOSED TO ANY EFFORT TO FINANCE ADDITIONAL SECURITY NEEDS FROM FUNDS SET ASIDE FOR SAFETY AND CAPACITY. CONGRESS MUST PROVIDE DEDICATED MONEY ABOVE AND BEYOND CURRENT GRANT LEVELS SO THAT AIRPORTS ARE NOT FORCED TO FOREGO CRITICAL SAFETY- AND CAPACITY-RELATED PROJECTS.

MOREOVER, WE BELIEVE THE COSTS ASSOCIATED WITH THE COMPUTER ACCESS REGULATION WILL FAR EXCEED THE FAA'S ESTIMATES. THEREFORE, EVEN WITH THE AMOUNTS ALLOCATED FOR THIS PURPOSE IN YOUR PROPOSED LEGISLATION, AIRPORTS WILL PROBABLY HAVE TO USE THEIR AIP FUNDS OR FIND OTHER SOURCES TO FUND COMPLIANCE WITH THE RULES AS NOW INTERPRETED BY THE FAA.

FAA HAS SUGGESTED THAT IT MAY COST ABOUT $170 MILLION FOR THE ENTIRE 270-FACILITY SYSTEM. HOWEVER, THE INDUSTRY HAS ESTIMATED THAT THESE SYSTEMS COULD REALISTICALLY COST MORE THAN $1 BILLION BECAUSE THE FINAL RULE ENCOMPASSES ALL BUILDINGS AT AN AIRPORT, NOT JUST THE TERMINAL FACILITY AS PROPOSED IN THE NOTICE OF PROPOSED RULEMAKING.

AS GERRY FITZGERALD, ASSISTANT DIRECTOR OF AVIATION FROM THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY, TESTIFIED BEFORE THIS

SUBCOMMITTEE ON MARCH 21, IF THE FAA INSISTS ON ITS CURRENT INTERPRETATION OF THE RULE, THE COSTS FOR JFK ALONE COULD EXCEED $27 MILLION.

SO, MR CHAIRMAN, WE URGE YOU TO STAND FIRM IN YOUR CONVICTION THAT THESE SECURITY FUNDS BE APPROPRIATED IN ADDITION TO FUNDS EARMARKED FOR OTHER PROGRAMS. ONE CAN HARDLY THINK OF A MORE APPROPRIATE USE OF THE $6 BILLION SURPLUS THAT PASSENGERS HAVE PAID SO THAT CAPACITY, SAFETY AND SECURITY NEEDS CAN BE MET.

IF THESE ADDITIONAL SECURITY REQUIREMENTS CANNOT BE FUNDED THROUGH NEW APPROPRIATIONS FROM THE TRUST FUND, THEN WE BELIEVE CONGRESS SHOULD EXAMINE THE IMPOSITION OF A SECURITY SURCHARGE ON ALL PASSENGER TICKETS, AS WAS SUCCESSFULLY USED IN THE EARLY SEVENTIES.

AAAE FULLY SUPPORTS THE OBJECTIVE OF IMPROVING SECURITY THROUGH CONTROLLING ACCESS TO SECURED AREAS OF AIRPORTS. HOWEVER, AS STATED IN OUR EARLIER TESTIMONY BEFORE YOUR SUBCOMMITTEE, IN ADDITION TO THE ISSUE OF COSTS, THERE ARE A NUMBER OF UNANSWERED QUESTIONS REGARDING THE FAA'S RECENT ACCESS CONTROL REGULATION WHICH NEED TO BE RESOLVED BEFORE A MASSIVE COMMITMENT OF FUNDS IS UNDERTAKEN. WE DON'T WANT TO RUSH INTO THE WRONG SOLUTION TO A REAL PROBLEM.

CONSEQUENTLY, TO RESOLVE THESE QUESTIONS, AAAE AND OTHER INDUSTRY GROUPS CONTINUE TO BELIEVE THAT A FEDERALLY FUNDED DEMONSTRATION PROGRAM SHOULD BE ESTABLISHED BEFORE HUNDREDS OF AIRPORTS ARE FORCED TO INSTALL UNTESTED SECURITY SYSTEMS. THE EXPERIENCE GAINED FROM THIS TEST WOULD SUPPLY ALL PARTIES -- AIRLINES, AIRPORT OPERATORS, OTHER AIRPORT TENANTS AND THE FAA -- WITH VALUABLE EXPERIENCE REGARDING THE DESIGN, INSTALLATION, OPERATION, COMPATIBILITY, AND MONITORING OF AIRPORT ACCESS SYSTEMS.

THE NEED FOR SUCH A TEST CAN BE ILLUSTRATED BY REFERENCE TO JUST ONE OF THESE ISSUES--COMPATIBILITY. THE NEW RULE IS TOTALLY SILENT ON THE COMPATIBILITY OF SUCH SYSTEMS FROM ONE AIRPORT TO ANOTHER. FOR EXAMPLE, DOES AN AIRCREW MEMBER WHO HAS FIVE STOPS SCHEDULED IN ONE DAY NEED FIVE COMPUTER ACCESS CARDS TO DO HIS OR HER JOB? AND WILL HE OR SHE NEED FIVE MORE THE NEXT DAY WHEN FLYING A DIFFERENT ROUTE? THIS IS NO MINOR POINT, MR. CHAIRMAN. IT'S A SUBSTANTIAL OPERATIONAL QUESTION AND ONE WHICH THE FAA IS UNPREPARED TO ANSWER.

MOREOVER, THIS IS BUT ONE EXAMPLE OF A MYRIAD OF OPERATIONAL ISSUES TO WHICH WE HAVE TESTIFIED BEFORE. SUFFICE IT TO SAY THAT THE ADVISORY CIRCULAR THAT THE FAA HAS PROMISED TO ISSUE TO ADDRESS SUCH CONCERNS STILL HAD NOT BEEN FORTHCOMING, DESPITE THE FACT THAT THE RULE WAS FINALIZED ON FEB. 9 AND THE FIRST COMPLIANCE DATE FOR AIRPORTS TO SUBMIT REVISED SECURITY PLANS IS AUG. 8.

IN ADDITION, AND PERHAPS MOST IMPORTANTLY TO OUR MEMBERS, WE BELIEVE THE NEW REGULATION FAILS TO RECOGNIZE THE IMPORTANCE OF AIRPORT TENANT RESPONSIBILITY FOR THE SECURITY OF AN AIR OPERATIONS AREA. ANY EFFECTIVE SECURITY SYSTEM MUST FORCE INDIVIDUAL TENANTS OF AN AIRPORT -- AIRLINES, FIXED-BASED OPERATORS, AIR CARGO COMPANIES -- TO BE ULTIMATELY RESPONSIBLE AND ACCOUNTABLE FOR THE SECURITY OF THEIR EXCLUSIVE AREAS.

AIRPORT OPERATORS SHOULD BE HELD TO THE SAME STANDARD OF SAFE AND SECURE OPERATIONS AS ALL OTHER ELEMENTS OF THE CIVIL AVIATION INDUSTRY: THAT OF UNDERTAKING PROGRAMS REASONABLY DESIGNED TO PROVIDE FOR THE SAFETY AND SECURITY OF PASSENGERS AND PROPERTY IN AIR TRANSPORTATION AND THEN CARRYING OUT THOSE PROGRAMS IN A COMPETENT MANNER. THE CURRENT FAA POLICY AND REGULATORY REGIME APPEARS TO REQUIRE THE AIRPORT TO GUARANTEE THE SAFETY AND SECURITY OF PASSENGERS. THIS IS AN IMPOSSIBLE STANDARD TO MEET WHEN SO MANY FACTORS ARE BEYOND THE AIRPORT OPERATOR'S CONTROL.

MR. CHAIRMAN, AIRPORT EXECUTIVES DO NOT SHIRK THEIR SECURITY RESPONSIBILITY. INDEED, THEY TAKE IT VERY SERIOUSLY. IF THE AIRPORT IS AT FAULT FOR A SECURITY LAPSE, THEN THE AIRPORT SHOULD BE HELD ACCOUNTABLE--NO RESPONSIBLE AIRPORT EXECUTIVE WILL ARGUE WITH THAT PRINCIPLE. IF, HOWEVER, A PROBLEM ARISES THAT IS NOT UNDER THE CONTROL OF THE AIRPORT OPERATOR, THEN THE OPERATOR SHOULD NOT BEAR THE LIABILITY.

MR. CHAIRMAN, ONCE AGAIN, LET ME SAY THAT AAAE APPRECIATES THE

LEADERSHIP ROLE YOU AND THE OTHER MEMBERS OF THIS SUBCOMMITTEE HAVE UNDERTAKEN WITH REGARD TO THIS VITAL AVIATION ISSUE. WE STAND READY TO ASSIST IN WHATEVER WAY POSSIBLE.

I WELCOME ANY QUESTIONS YOU MAY HAVE.

# AIRPORT OPERATORS COUNCIL INTERNATIONAL

**STATEMENT OF**

Jeffrey W. Hamiel
Executive Director
Minneapolis/St. Paul Metropolitan Airports Commission

On behalf of

**AIRPORT OPERATORS COUNCIL INTERNATIONAL**

On

**H.R. 1659, "Aviation Security Act of 1989"**

Before the

Subcommittee on Aviation
Committee on Public Works & Transportation
U.S. House of Representatives

April 25, 1989

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- AOCI represents the local, regional and state governing bodies that own and operate the principal airports served by scheduled air carriers in the United States and throughout the world.
- AOCI member airports enplane more than 90 percent of total domestic and virtually all international scheduled airline passenger and cargo traffic in the U.S.

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(First line of message should read: "MAILBOX TO AOCI")

# Statement of the Airport Operators Council International before the House Aviation Subcommittee on H.R. 1659, "Aviation Security Act of 1989", April 25, 1989

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Good morning Mr. Chairman and Members of the Subcommittee. I am Jeffrey Hamiel, Executive Director of the Minneapolis/St. Paul Metropolitan Airports Commission. I appreciate this opportunity to appear on behalf of the Airport Operators Council International (AOCI) to discuss our views on your bill, HR 1659, the "Aviation Security Act of 1989." AOCI represents the local, regional and state governing bodies that own and operate the principal airports serving scheduled airlines in the U.S. and throughout the world.

As the governments responsible for the safe and efficient operation of our nation's and the world's airports, we have an intense interest in the enhanced security of airports, air carriers and, most importantly, air travelers. Efforts to ensure the security of commercial aviation require concerted federal and local actions.

The Congress has made clear its interest in, and commitment to, the issue. This is the sixth hearing at which we have testified on the subject in recent weeks, and the first in which a specific piece of legislation offers an approach to at least two parts of the problem -- enhanced security at foreign airports, where the bulk of the terrorist threat exists, and funding for enhanced access control at 270 domestic airports, which have been mandated to make extensive augmentations of their security systems with no financial help from the government.

We commend you for your concern about aviation security and your prompt response in developing legislation to provide funding for enhanced explosive detection and airport access control systems. Funding is certainly a critical component to enhancing aviation security, and we would like to offer specific comments and suggestions on your bill.

## AOCI Supports "Airport Security Assistance Program" and Recommends Additional Funding Methods

H.R. 1659 is an important first step towards better aviation security in its attempt to provide new funding for enhanced security systems at airports. It demonstrates to us that you have heard our concerns. With respect to airport access control systems, AOCI strongly supports the provision in your bill authorizing grants from the Aviation Trust Fund. Providing Trust Fund resources in a new security assistance program, separate from AIP, is very important to prevent existing but limited AIP funds from being diverted from other important airport security, safety and capacity projects. FAA plans to provide only about $28 million in FY '89 and $36 million in FY '90 in existing AIP funds for access control systems.

However, we have two basic concerns: (1) The $170 million authorization for airport assistance will be insufficient, and (2) there is no assurance that these new funds will actually be appropriated.

First, the $170 million that would be authorized is based on the FAA's cost estimate over ten years for installing systems at 270 airports covered by the rule. As we noted in earlier testimony before this Subcommittee, the FAA has grossly underestimated the costs. AOCI and other aviation industry groups estimate that the actual costs will be as much as ten times the FAA's estimate, $1 billion or more. While the FAA estimate focuses on the cost of equipment, it virtually ignores the costs of structural modifications that will be required and additional costs and complications that will be incurred in handling asbestos in older buildings.

The FAA figures also incorrectly assume the rule will affect an average of 128 access points for a "phase one" airport (i.e., one that screens more than 25 million passengers annually.) There are a significant number of major airports at which a single building has more access points than this. Minneapolis/St. Paul International Airport has more than 500 access points which would cost an estimated $9 million for installation of automated control systems; Baltimore/Washington International (BWI) has more than 130 access points to the air operations area from the terminal building alone; Chicago stopped counting at 1627 access points; Miami estimates 970; Kennedy International has more than 1500 access doors in about 50 passenger terminal buildings (estimated cost, $27 million); Newark International has about 1000 doors, and La Guardia will have about 750 access points impacted by the rule. Many of these estimates do not include vehicle gates, air cargo and maintenance buildings, hangars, general aviation facilities, joint military use and other facilities that are covered by the rule.

At an estimated cost per access point of $18,000, these airports alone will need more than $170 million. In addition to the expensive installation of these systems, airports will also have to pay the annual costs associated with operating and maintaining the systems, which could be about 10% of installation costs annually.

Secondly, as this Committee knows, we face the constant problem in the annual budget and appropriations process of getting the fully authorized amounts funded. Even with this Committee's best intentions and efforts, there will not be enough grant assistance available to cover access control installation costs.

Therefore, AOCI would like to suggest some alternatives that, in tandem with a new security assistance grant program, would help ensure that airports have the full financial capabilities to implement these systems within the FAA's compliance deadline.

**Alternative Security Funding Proposals**

AOCI has developed two new funding initiatives which have been endorsed by our member airports -- large and small -- across the country. One is to create an Airport Revolving Loan Fund (RLF) from a portion of the Trust Fund surplus to provide annual loans, in addition to grants, for security, capacity, safety and noise projects. Initial loans could be made directly from the Trust Fund surplus over a few years, and could be devoted to funding access control systems. In order to provide a long-term, reliable source of funds outside of federal budget limitations, we have suggested that airports repay the loans into a separate "off-budget" RLF, which could then make additional loans for security and other important safety and capacity projects. This would not only help airports pay for access control and improve security, but would put the Trust Fund surplus to productive use for aviation improvements, for which it was intended. Over 30 years, the RLF could generate funds to finance $68 billion in airport construction projects. Thus, a relatively small contribution from the Trust Fund would create a self-sustaining funding source for airports.

Another option is to permit airport operators to impose a passenger charge which could be devoted first to meet federal security requirements, such as the access control rule, and then used to finance other airport security, capacity and safety projects. AOCI has long supported returning to airports the ability to raise revenues directly from passengers, since they are the users that most directly benefit from airport facilities and services -- including security measures -- and impose the demand for facility improvements and expansions. Unfortunately, the current prohibition on airport passenger charges was not removed when deregulation was enacted, and airports have been forced to meet unconstrained air traffic and passenger demand with limited resources. This has been a major constraint to airports' developing facilities and adding capacity in a timely and cost-effective manner, and has contributed to the serious problems of congested airport facilities and delays. AOCI's Operations, Safety and Security Committee met recently to discuss security funding needs and strongly endorsed this proposal to allow airports the option of imposing passenger charges -- a "security/capacity charge". It would be a flexible and powerful financing tool, and perhaps best of all, it would have no cost to the federal government.

We would be happy to provide you with more details on our proposals. We believe this would be the best and most efficient step to ensure airports are fully able to finance new security systems to comply with the FAA's rule.

## Airline Security Assistance Program

There is no doubt of the need to accelerate the development and use of the best available explosive detection systems at airports abroad and at home where they are needed. We do, however, have concerns about using Aviation Trust Fund monies for this purpose. The present urgency to deploy explosive detection systems is being driven by terrorist threats abroad against the U.S. Government and its policies and/or actions. We share the view expressed by many members of Congress during hearings on this issue that the Pan Am 103 attack and similar terrorist actions are directed not at airline passengers or a specific U.S. carrier, but at the U.S. Government itself. Innocent passengers and aircraft are only the medium through which terrorists can attack the U.S. Government.

We therefore believe that this is a federal government responsibility and that the costs of these systems should be borne, in whole or in part, by the U.S. Government out of general revenues. This is necessary both from the government's moral responsibility to protect U.S. citizens at home and abroad, and the government's responsibility to protect the integrity of the Trust Fund.

The costs of TNA and similar explosive detection systems are exorbitant, and to install sufficient equipment at all airports where they are needed would put a tremendous burden on limited

Trust Fund resources. For example, just one TNA device at each of some 45 foreign airports would cost nearly $45 million. The Air Transport Association estimates that TNA and vapor detection systems needed at those 45 "high-threat" foreign airports will be $66 million. To have only one TNA device at each of the 270 U.S. airports that are subject to the FAA's access control rule would cost another $270 million. Of course many airports will need more than one; JFK International estimates the need for at least nine. Given current federal budget pressures, funding additional grants to airlines for these systems would inevitably compound the problem of getting Trust Fund dollars spend for airport and airway improvements in the U.S. for which it was intended, and for which passenger and other aviation user taxes are dedicated.

Using the Trust Fund for explosive detection systems in foreign locations falls well outside the intent and purpose of the Trust Fund. In whatever course of action is chosen by the U.S. Government, it must be handled with sensitivity and understanding of the international aviation community and sovereign governments whose airports would be affected. The interests of U.S. and international aviation security will not be served if the U.S. Government takes a high-handed approach in dealing with its counterparts abroad.

One alternative would be to make the placement of foreign TNA equipment a U.S. Government/FAA owned-and-operated function. We must also keep in mind that airlines, unlike airports, already have the option available to them of imposing surcharges on their passengers for additional costs and services, which they have already exercised in passing on local fuel charges at some U.S. airports, and in several instances a $5.00 security charge on trans-Atlantic routes.

We would like to suggest another alternative: The Revolving Loan Fund we have suggested could be developed to permit loans from the Trust Fund to airlines for explosive detection systems. This would provide a source of assistance from the Trust Fund and, since the loans would be paid back (preferably into a new "off-budget RLF"), the repayments could be used to make additional loans for airport projects.

In considering the deployment of explosive detection devices at airports, we believe that the government's first response should be at foreign airports where the terrorist risk is greatest. We totally support the purchase and testing by the FAA of 6 Thermal Neutron Analysis devices which will be installed this year and early next year at selected U.S. airports. However, there are important questions that must be carefully addressed given the enormous size of these devices and the many operational problems which may need to be resolved to employ them successfully. The sheer size of TNA devices could impose upon the airports radical reconfigurations of terminal space and baggage handling systems. We urge that extensive testing of these initial 6 devices be undertaken so that the optimum procedures and locations of equipment can be evaluated for full scale implementation.

The role and responsibility of airport operators must also be considered, particularly the procedures that should be followed when bags trigger the alarm. Where TNA is used and a piece of luggage is identified by the carrier as suspect, the ultimate responsibility for response and enforcement lies with the airport operator. The new TNA equipment reportedly may have a false detection rate as high as 5%. Once the machine singles out a bag -- perhaps 5 out of 100 will be false alarms -- the screener must determine if the bag is a legitimate threat. If it is, where does it go? Who takes it there? What do they do with it? What will be the effect on passenger processing time? These questions, and more, become the airport operator's responsibility in supplying law enforcement response. A further problem is the physical one: where on the airport is the space available, sufficient to hold a ten-ton machine? Who will pay for those structural modifications? Who operates and maintains the machines? What do you do with the passenger who must be denied boarding because of a baggage test failure?

The testing of the TNA device should be tied together with the pilot program for access control systems that AOCI and other aviation industry groups have recommended, so that we have a comprehensive, well-tested and effective total program for enhanced security.

In some cases it may be desirable for the airport to be the owner and operator of the TNA equipment. Depending on the specific circumstances, an airport and its airlines may wish to reach some mutual arrangement achieve the best and most efficient utilization of the devices. While we need to explore this possibility further, it seems to solve several of the problems inherent in carrier-owned equipment. By installing the equipment at the major entrances to a terminal, all baggage, including carry-on, is checked, not just selected high-risk flights. Indeed, all persons are checked, including the greeters, employees, flight crews, maintenance people, etc. The airport could simply bill carriers for each bag cleared. A failed baggage check results in denial of entry to the airport, so that no flight, domestic or international, is at risk from checked or carry-on baggage.

## H.R. 1659 Should Authorize Funds and Direct FAA to Initiate A Pilot Program for Airport Access Control

As we testified previously, AOCI supports the objective of FAA's access control rule, but there are serious problems and questions regarding implementation and operation that must be first addressed and resolved through a pilot program. In the security business, any shortcomings or failures in security systems can have life or death consequences, particularly where terrorists are involved and are looking for any weakness or opening.

For example, while the rule strives to ensure that airport operators have better control over access to secured areas on the airport, it overlooks the fact that virtually every baggage carousel has an opening covered only by plastic strips through which bags travel and through which anyone can crawl from the baggage claim area onto the secured area.

It is not enough to throw money at the problem; we must first be certain we are spending money on tried and tested systems and equipment which are proven to be effective and as risk-free as possible. We have no such certainty with the access control systems FAA is mandating. FAA has not only underestimated the costs and provided no funding, but has little guidance and few answers to offer on the many practical and operational questions that have been raised.

We are not suggesting that the FAA's rule be put on hold. We should aggressively pursue the development and installation of better access control systems as an important element in an airport's overall security program. There are certainly many improvements to the systems which can, and should, be undertaken without delay. But in doing so, we must proceed with caution. The very short and unrealistic time FAA has given airports to implement the complex systems required by the access control rule is forcing many airports to rush ahead in pursuit of systems and vendors which may not provide the best technology for their requirements.

But if access control systems are chosen in haste, it may preclude compatibility now or in the future among airports, and could close many doors of opportunity. It may also have the negative effect of requiring a very expensive retrofit down the road when we find that many of us took a wrong turn in rushing to compliance.

The physical aspects of aviation security are costly because they involve massive construction or modification of entire facilities and the purchase of expensive, advanced technologies. Every airport has a unique situation, unique facilities and needs, and faces a unique set of threats, which multiplies the complexity, and in turn, the cost, of solutions.

That is the reason we have consistently sought a federally funded pilot program, to identify appropriate technologies and methodologies which might, among other things, ultimately lead to a system which becomes universally compatible. We recommend a four or five airport program, funded at approximately $12 million for the first year, which will install and test many of the myriad of hardware and software available. Airports of varying size and complexity would give us real-time, real-world experience in what does -- and does not -- work.

Without proper guidance and experience, which FAA does not now have and which can only be obtained through a pilot program, nobody knows just yet what the best or most effective system is. Many airports are waiting to choose an access control system until the FAA's Advisory Circular is issued -- the document which should clarify some of the rule's requirements and ambiguities and which is now more than two months overdue. The FAA has avoided defining something as basic, yet critical, as the term "secure area", leaving airports with no guidance as to what, or how much, must be included in our security plans to meet FAA criteria.

Of course, we can proceed; but only to a point. After the FAA's Advisory Circular clarifies their interpretations of the criteria we must meet (and preliminary indications are that many important questions will remain unanswered), the pilot program we have suggested could begin to help determine viable, effective, and compatible systems. Airports have already begun and will continue accelerated work required to accommodate any automated system: conduit and wiring, new doors, frames, hardware and locking mechanisms, and seeking bids for computers and software which would adapt to most electronic access systems. Many have already begun this process -- JFK has already spent $500,000 on just such advancements -- but still cannot read enough sense into the rule's requirements to determine what information will be placed on each employee's access card. Although we believe strongly that the rule should be modified to provide a more realistic timeframe for compliance, especially to allow for operational results and guidance that would come out of a pilot program, a sensible approach would be to focus the implementation schedule on the Category X (highest security threat) airports, those identified by FAA as having the greatest security threat. We must question, however, the FAA's wisdom in putting the shortest deadline on the largest airports which will have the greatest number of access points and will require the most complex, sophisticated and costly systems.

## Airport Tenant Responsibility for Security

Another problem which concerns us greatly is that of airport responsibility and liability for security in areas controlled by their tenants. While Part 107 of FAA regulations permit airport operators to pass along certain liabilities to the air carriers for their exclusive areas, if certain requirements are met, the access control rule does not address the problem wherein the airport operator is presently held responsible for the actions of its other tenant's in their exclusive lease areas, cargo and mail facilities, general aviation ramps, and joint use military operations. The FAA rule holds the airport operator strictly liable for ensuring that "...access is denied immediately at the access point or points to individuals whose authority to have access changes."

This forces the airport operator into the role of regulator of tenants, even when they are far from the terminal area, out of sight and removed from the airport operator's ability to monitor and control them.

We believe the airport operator should not be held liable for security violations when it is not at fault, or when it has no way of monitoring or controlling tenant activities. This might apply, for example, where a tenant fails to advise the airport that its employee has been fired, or has lost his security ID, which could result in unauthorized access to secure areas.

We recommend the addition of language in the bill to require the FAA to amend Part 107.14 to permit airport tenants to be held accountable for security violations under their control.

## The Need for Compatibility and Standardization in Access Control

We would like to go back for a moment to the concept upon which this entire exercise is based: the level of threat perceived at

American airports. We have stated before Congress on several occasions that the access control rule, aside from being poorly structured, was triggered by a once-per-generation aberration, the "internal threat" from a disgruntled employee. We agree with FAA and ATA that the principal threat is terrorism from abroad, but it is surely sensible to have the government assess and communicate its view of the threat or threats, and to act accordingly. We should deal with "first things first", concentrating our scarce resources on real threats.

We accept the underlying need for enhanced access control at most major domestic airports, recognizing however that access control is not security. It is a management tool, and only one element which must be integrated into an overall security plan. We agree that the access control rule seeks an admirable goal. Unfortunately, in the way directed by DOT/FAA, it is one which cannot be reached in the time given.

There is yet another issue. While the DOT/FAA rule is totally silent on the need for or desirability of technical compatibility of such systems from one airport to another, the benefit of being compatible is obvious.

The nature of aviation is that anyone is but a few hours from any point on the globe. Yet we seem to be heading toward a situation where the crew of an airline which stops at seven cities in the course of a day will have to carry seven different access cards today (and perhaps as many different ones tomorrow). There is no indication in the DOT/FAA rule as to just how a discharged employee will have his termination announced to the systems at many other airports "immediately" -- a term which the FAA uses but does not define, and which seems to be gathering ambiguous, and often conflicting, responses from FAA's regional offices.

It seems self-evident to us that since access control systems must cover more than just local airport and local airline personnel, at least some level of national and international standardization of the identification process and media is desirable, if not essential, --

a. to achieve best use of the systems beyond just the specific airport;

b. to assure the interoperability needed to avoid airline personnel having to carry and maintain a stack of identity credentials;

c. to offer some hope of achieving the objective of rapid international communication to validate and void identity credentials;

d. to offer at least some hope of not wasting very large amounts of money when it becomes clear to DOT/FAA and other agencies around the world that additional data is needed, and/or that a universal identification system is essential for practical operational reasons and to facilitate rapid communications between responsible organizations.

In the very short time available under the FAA rule, several airports are trying to agree on some level of uniformity for the identification medium. FAA has so far declined to help in developing an appropriate standard which might have universal appeal and which might prospectively become a world standard; yet it seems to us they must be active participants with us.

There are several areas on which at least preliminary agreement is of great importance, and on which at least a start could be made in a short time. Since credit card formats for use with card readers are being considered by several airports as the medium of choice, couldn't the industry agree on the card configuration, magnetic stripe location, storage format, data content, capacity, data layout, etc.?

The Airport Operators Council International (through its Operations, Safety and Security Committee) has begun a cooperative effort with other industry groups -- especially airlines and pilots -- to try to identify at least the fundamental areas which must be agreed on if there is to be hope for universal compatibility.

The first step is to establish over the next few weeks what technology is already being used, or has been committed to, by airports and other users of the system. This will provide some guidance to those who have yet to make their decisions, and may avoid the expensive pitfall of having many airports close the door on the possibility of future compatibility with other airports.

The second step will be to establish the necessary minimum standards needed for a world-wide, or at least nation-wide, compatible system with appropriate communications capability to help achieve the quick response desired. We will need the help of airlines, pilots, identification technologists and standards organizations, and communications firms, as well as the active support of FAA, State, Commerce and ICAO.

We thank you for this opportunity to provide our views on this important bill. I would be happy to try to answer any questions you may have.

At this point I would like to call back to the witness table our departmental and FAA witnesses, Deputy Assistant Secretary Knisely and Director Freeman.

You have very patiently sat through the previous testimony. I know that you made notes on what we said. At this point, I would like to give you an opportunity to respond to questions raised, or points made by previous witnesses.

## MR. KNISELY, MS. FREEMAN—RESUMED

Mr. KNISELY. If I may, sir. Mr. Lally was talking about the competitive disadvantage. I continue to think that the improved security of the TNA devices may provide a competitive advantage for U.S. carriers, and at a remarkably cheap price. He did not refute the $1.25 for the additional charge, which would not be included within the fare. It is obviously a charge, as you noted from the advertisement, but that would be in addition to the existing surcharge. I think people view that differently and would see that as a benefit.

I believe also he mentioned total domestic security costs of $500 million, which is, coincidentally, very close to the number of enplanements in the domestic system.

It looks as though security is costing American passengers $1 for every takeoff and $1 for every landing, which, again, does not seem excessive to me. I would see no particular reason that general revenues would be an appropriate resource. I have a different mental image of this problem, which is based on the risk to the passengers rather than on the threat to the flag, as has been apparent.

My analogy, perhaps a stretched one, is that a century or so ago, when a stagecoach wanted to go through hostile territory, they hired a man to ride shotgun, and they paid him, and they passed that charge on to the passengers. They did not send people to Washington saying that U.S. citizens were threatened, and that they wanted government funding to pay the man who road shotgun.

The American carriers are not forced to go into hostile territory, nor are American passengers forced to go into airports which are a threat. This is the free enterprise system, and I find it difficult to distinguish our two situations. I think that is about it, sir.

Mr. OBERSTAR. Well, Mr. Secretary, when stagecoaches grow wings I think we can adopt that approach. I appreciate the analogy but this is a vastly different era. I neglected, and intended to raise this point earlier. In testimony we had back in March, our colleague, Congressman Burton, of Indiana, suggested that as an interim device sniffing dogs be used in checking baggage. Ms. Freeman, do you have a response to that?

Mr. KNISELY. It sounds cheaper, Mr. Chairman.

Mr. OBERSTAR. That was his suggestion—cheaper, quicker—but there were some questions raised in other testimony in March about using sniffing dogs. But before we proceed further with this legislation, I want to give his point a fair response from FAA.

Ms. FREEMAN. I think, as we have testified before, we do have a very active canine program; however, there are limitations with the dogs. The time that they are useful is limited. In addition to that, we would encounter considerable difficulties using canine teams abroad, where we would have to depend on the foreign governments' teams, and their training. In this country, we do regulate these teams and we do provide for specific training for these dogs, but we would not be in a position to assure that in foreign locations.

Mr. **Oberstar**. What is your response to the just previous testimony about a demonstration program, or a trial period to work out the bugs on the access doors issue?

Ms. **Freeman**. We have the petition that was mentioned, and it is under review now, and I would not want to preempt the acting administrator or the Secretary on that, but I would assure you that we are considering the petition very seriously at this time. What we had said in our final rule was that because we had the experience of several airports that already had these systems in place, including Baltimore-Washington International, we felt that a pilot program at this time would not really provide any more useful information that we did not already have.

Mr. **Oberstar**. It seems to me we have got computerized access systems in many locations around the country, and many airlines themselves have computerized access, in particular to their CRS operations, which are very sensitive, and require heavy security. So this is not an issue that is new. I am not quite sure just what would be learned from a demonstration program, but I am glad to see that you are going to be considering that further.

The gentleman from Pennsylvania has further questions.

Mr. **Clinger**. Thank you, Mr. Chairman. Just a couple of questions. A question has been suggested as to what effect the TNA devices might have on foodstuffs. If you have foodstuffs being transported by air, and they are subjected to the radiation inherent in this device, is there a risk there?

Ms. **Freeman**. No, there is not. Although TNA has not been licensed specifically for foodstuff in cargo, should foodstuff be included in somebody's baggage, it would not present a risk to the individual. I might note that the TNA has been licensed by the Nuclear Regulatory Commission, and had been approved by the State of California for the testing that took place in that State. I am assured by our scientists that there would not be a health risk with the foodstuff.

Mr. **Clinger**. You say that cargo would not be covered by the TNA?

Ms. **Freeman**. Not specifically foodstuff cargo; in other words, where you would send foodstuff in cargo containers.

Mr. **Clinger**. That is not going to be screened?

Ms. **Freeman**. It was not licensed for that purpose. It was licensed for the purpose of passenger baggage, and whatever that might include in it.

Mr. **Clinger**. So how do we then determine that foodstuffs, as cargo, are safe?

Ms. **Freeman**. If you will give me a moment, I will have to turn to Dr. Malotky.

If I may, I would like to have Dr. Lyle Malotky, who works at the Federal Aviation Administration, and is one of our explosives research and development experts, testify on this point.

Dr. **Malotky**. The specific issue of the safety of foodstuffs, pharmaceuticals, and cosmetics passing through the TNA system was addressed, at our request, by physicists from the National Bureau of Standards, who looked at the elements that were present in the common articles of commerce, and looked at the levels of radiation that the unit was subjecting them to, and then drew a conclusion, that there was no problem with residual radiation, or with any other sorts of changes that would be harmful to the products.

Mr. **Clinger**. But now I understood Ms. Freeman to say that it is not presently proposed that foodstuffs being shipped as cargo will be screened by the TNA.

Dr. **Malotky**. That is correct. In the licensing process, they differentiated between the casual box of candy which a passenger would have in his checked baggage versus 100 million tons of oranges coming out of a country, that would be routinely run through this.

Mr. **Clinger**. How, then, do we know that there is not a pound of plastique amongst the oranges? They will not be checked?

Dr. **Malotky**. That is correct; yes.

Mr. **Clinger**. Okay. Do I understand that you are proposing to test a new permutation of the vapor detection equipment in the near future?

Ms. **Freeman**. What we are proposing to do—there is a vapor detection unit that is operational at this time, and we have made arrangements with the manufacturer to run tests of that vapor detection unit at the FAA's Tech Center, in order to determine exactly what types of explosives it could detect.

Mr. **Clinger**. Do you see the vapor detection and TNA as complementary, or could we use either one, or the other, to accomplish the same goal? Are they complementary?

Ms. **Freeman**. We would view the vapor detection technology as being potentially complementary; however, at this time, I think it would be premature to move ahead with the vapor detection technology as quickly as we are with the TNA technology, simply because we have had—in some of the testing that we have done, we have had some questions about reliability as well as throughput.

Mr. **Oberstar**. Would the gentleman yield at that point.

Mr. **Clinger**. I would be happy to.

Mr. **Oberstar**. I was going to raise the same question following your questioning. The U.S. Army already uses vapor detection devices at various locations. The Navy is using them, and nuclear power facilities—the gentleman is correct—use vapor detection systems already.

Ms. **Freeman**. Yes. The question is, with aviation, what we have encountered in recent times is a sophisticated level of explosives that is being used, and we are not confident, at this time, as to the reliability of these vapor detection systems as they now exist, to detect the types of plastic explosives that we have encountered in civil aviation.

Mr. **Oberstar**. But there is a further test effort under way now by FAA with the vapor detection technology, and I understand you are going to test it further?

Ms. **Freeman**. That is correct.

Mr. **Oberstar**. And what harm can be done, at least on an interim basis, by using this available technology, which does have a detection rate? I mean, it is workable; it has already been used by another Government agency. The Air Force is going to follow on to the Army contract, I understand, and extend that contract, buy more of these devices, put them in place. They are already in a production line.

It would add to, certainly not detract from security.

Ms. **Freeman**. While there would be certainly some deterrent value to be served, we would hesitate to require the airlines to install technology that will probably, within the next 18 months, reach a level which will be the level that we would like to see it at.

Mr. **Oberstar**. Thank you. I yield back to the gentleman.

Mr. **Clinger**. You are saying that within the next 18 months you anticipate that the vapor detection technology will be much better as far as reliability is concerned?

Ms. **Freeman**. That would be our estimate, based on the efforts that we have ongoing in R&D, in that area.

Mr. **Clinger**. And how does the reliability of TNA, at the present time, relate to the reliability of vapor detection?

Dr. **Malotky**. Well, sir, we feel much more confident about the performance of thermal neutron analysis because of the extensive airport testing which we have done. We have tested it in six different locations with over 40,000 passenger bags, and in so doing have been exposed to the wide variety of potential false alarm materials.

The testing that has been done with the vapor detection systems, that we have done so far, have been of a much more limited preliminary nature, if you will.

Mr. **Clinger**. Are there methods for defeating the TNA? In other words, shielding the explosives so that the TNA does not identify it?

Dr. **Malotky**. That is a question of intellectual curiosity to a scientist. Indeed, we have not only funded specific research in that area of countermeasures and their detection, but the scientists which developed the system have also thought about the problem.

Indeed, there may very well be ways to defeat the system, but these ways give characteristic markers of their presence. The TNA system cannot tell if there is an explosive present or not, but it can certainly tell that something strange is going on, that it cannot appropriately screen this bag, and so the bag may not receive a red sticker, but, rather, an orange sticker, and must be dealt with some other way.

Mr. **Clinger**. Thank you.

Mr. **Oberstar**. This matter, I will say to the gentleman, was explored in our executive session on security in March, and some of these questions were answered, and others were not asked simply because the answer to the question may be more useful to the terrorist than to the committee.

I think it would be useful, and if the gentleman is interested, we could have a private discussion about this matter.

Does the gentleman from Texas have any further questions?

Mr. **Laughlin**. No, Mr. Chairman. Thank you.

Mr. **Oberstar**. Thank you for your patience, for being here throughout the morning and early afternoon, and responding very thoroughly to our questions. We appreciate your being here.

Mr. **Knisely**. Thank you, Mr. Chairman.

Mr. **Oberstar**. We shall proceed with the markup tomorrow morning, and for the balance of today, this subcommittee stands adjourned.

[Whereupon, at 1:37 p.m., the subcommittee was adjourned, subject to the call of the Chair.]

ADDITION TO THE RECORD

# STATEMENT FOR THE RECORD

FOR

THE SUBCOMMITTEE ON AVIATION

RE HEARINGS ON

# AVIATION SECURITY

TUESDAY, MARCH 21, 1989

As an inventor with more than 100 inventions to date, a significant number of my inventions cover a fairly wide band of the aviation technology spectrum, my prior professional background and overriding technical interests having been in this field. Among these aviation-oriented inventions a fair percentage relate to Aviation Safety including, of course, Aviation Security. It needs to be noted, however, that a number of problems can be readily resolved without the need for inventions per se but simply via a marriage of relevant technologies as the expertise and products of different companies are combined in the addressing of a given problem. Because of the tendency of companies to be very focused in their perception of the application potentials of their products, an outsider can very often see beyond such limited horizons and in recent years I have been devoting much of my attention to the co-ordinating of joint ventures by making companies aware of application possibilities as in-house expertise and hardware are synchronized with those of other companies to address what is sometimes major problems in business or the society at large.

Aviation Safety and, specifically, Aviation Security, presents a good example of how a major problem can be very effectively resolved through a polygamous marital association of relevant technologies. Since 1987 I have been seeking to coordinate just such a union among a number of high tech companies to address the issues of Passenger/Baggage Tracking and Personnel Movement Monitor and Control in the airport environment. I have recently brought to the attention of the Department of Transportation and the F.A.A. innovative systems relating to these two areas of concern, concepts which were developed on the basis of interviews with a number of parties performing various functions in the aviation world in addition to my own knowledge and experience amassed over the years. (It is noteworthy that in my own tests of security at National Airport I could enjoy unchallenged access to aircraft, transiting without difficulty from a public area to the aircraft maneuvering area, yet, ironically, was arrested for being in a restricted car parking lot!!!)

In the Passenger/Baggage ~~T~~racking System being proposed an admirable degree of security is achieved by means of an electronically "airtight" tracking system in which air crews and other airline personnel are appropriately alerted in good time on the occurrence of any disassociation of passenger and baggage that could pose a threat to a given aircraft. Current measures addressing this problem are totally and completely UNACCEPTABLE if real security is being sought in contrast to the existing kidding-of-ourselves approach.

In the Personnel Movement Monitor and Control System cited, suitably programmed equipment track the movement of all passengers, airport employees and others in restricted areas and can, should irregularities occur, not only sound appropriate alarms at the Airport Security Center but contain a given individual in certain areas until apprehended by rapid response forces.

It is to be noted that the enhanced security offered by these proposed systems demonstrate what is currently possible and can be immediately applied utilizing existing technology with no need for R&D delays. Not to institute them while claiming that more security is desired is, in the absence of more effective measures, not logical.

Omitted here are certain Confidential counter-terrorism proposals.

PAUL P. KELLY, Chairman
All America Marketing, Inc., 1825 Eye St. N.W., Suite 400, Washington, D.C. 20006

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Committee on Public Works and Transportation
One Hundredth Congress
U.S. House of Representatives
Room 2165, Rayburn House Office Building
Washington, DC 20515
TELEPHONE: AREA CODE 202, 225-4472

January 9, 1989

Honorable Jim Burnley
Secretary of Transportation
400 Seventh Street, SW
Washington, D.C. 20590

Dear Jim:

The tragic loss of life resulting from the sabotaged Pan Am flight #103 is a painful reminder of the vulnerability of a free society to terrorist attacks. We applaud your quick response to the situation by requiring mandatory measures on U.S. flag air carriers to significantly tighten security requirements at airports in Western Europe and the Middle East. We also strongly support the FAA's actions in promulgating its recent NPRM concerning security programs for foreign carriers that serve the United States.

In the interests of protecting the traveling public, we urge you to instruct the FAA to use its existing authority to take immediately whatever steps are necessary to impose upon foreign carriers serving the United States from Europe and the Middle East the same security requirements that it imposed on December 29 on U.S. air carriers serving those areas.

As you know, 50 percent of all U.S. citizens traveling abroad, travel on foreign flag carriers. Until we know more about terrorists and their actions and methods, prudence dictates that we apply all necessary precautions to all of the air carriers serving the United States. We should not make distinctions among airlines any more than we can try to differentiate by protecting a 747 aircraft but not a 727. If foreign carriers are not required to perform the same security measures as U.S. airlines, U.S. passengers traveling on the foreign carriers will not be given the same level of protection and security that would be afforded on the U.S. flag flights.

Thus, we urge you to direct the FAA to impose on all foreign flag carriers serving the United States from Europe and the Middle East the same requirements that are now imposed on U.S. carriers.

Sincerely,

John Paul
JOHN PAUL HAMMERSCHMIDT
Ranking Republican Member
Committee on Public Works
and Transportation

Glenn M. Anderson
GLENN M. ANDERSON
Chairman
Committee on Public Works
and Transportation

Newt Gingrich
NEWT GINGRICH
Ranking Republican Member
Subcommittee on Aviation

NORMAN Y. MINETA
Chairman
Subcommittee on Aviation

cc: Identical letter sent to Honorable T. Allan McArtor

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

March 20, 1989

The Honorable Glenn M. Anderson
Chairman, Committee on Public Works
  and Transportation
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter cosigned by Representatives Mineta Hammerschmidt, and Gingrich, to former Secretary of Transportation Burnley and former Federal Aviation Administrator McArtor regarding the December 29th action of the Federal Aviation Administration mandating heightened security measures for U.S.-flag carriers at Western European and Middle Eastern airports.

Aviation security is a global concern, not unique to the United States or U.S. carriers. While U.S. aviation has been a major target, no nation is immune to threats of sabotage and terrorism. Reflecting this, following the implementation of the extraordinary measures by U.S. airlines, then FAA Administrator McArtor wired a request through the Department of State to all of our major aviation partners, urging them to raise security levels for all carriers as soon as possible.

Shortly thereafter, the United States, along with the United Kingdom, called for a special session of the ICAO, which convened February 15th. Reflecting the seriousness of the situation, I was joined at that session by nine other ministers as well as the permanent ICAO representatives of 23 additional countries. I had the opportunity to speak with each of those ministers and with many of the other senior officials present, each of whom underscored his firm commitment to combatting acts of sabotage.

As a result of that session, the ICAO Council unanimously adopted a resolution setting out a plan of action that, I am confident, will lead to strengthened security procedures throughout the world. Specifically, on a priority basis, ICAO will review existing international standards applicable to all operations to determine what changes are necessary in light of recent events. It will also consider developing a set of extraordinary measures that can be put in place when increased threat levels exist. Further, we agreed to expedite research and development on detection of explosives and to explore the possibility of establishing an international regime for the marking of explosives.

In addition, as you are aware, we have issued a final rule which amends Section 129.25 of the Federal Aviation Regulations to require foreign air carriers serving the United States to adopt and use security programs that are acceptable to the Federal Aviation Administrator. This will make it possible to better ensure that the security measures implemented by foreign air carriers serving the United States are adequate to meet the threat that is ascribed to their operations.

Please be assured that we are committed to doing whatever it takes to make certain that the tragedy of Pan American World Airways Flight 103 is not repeated. In that regard, I am this week sending my personal representatives to the United Kingdom and West Germany to review security procedures and our cooperative relationships with these two key countries. As soon as they return and I evaluate their findings, I will undertake a similar trip to meet with my counterparts abroad to work toward the adoption of more stringent security measures.

I hope this information is helpful and want to thank you again for your expression of concern.

Sincerely,

Sam

Samuel K. Skinner